

Exhibit PP

AFFIDAVIT

STATE OF TEXAS)
)
CITY AND COUNTY OF DALLAS)

I, Albert Fox, being duly sworn, depose and say that I am the Advertising Clerk of the Publisher of THE WALL STREET JOURNAL, a daily national newspaper of general circulation throughout the United States, and that the notice attached to this Affidavit has been regularly published in THE WALL STREET JOURNAL for National distribution for

1 insertion(s) on the following date(s):

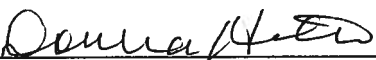
OCT-12-2012;

ADVERTISER: Bank of America Merrill Lynch Derivative Litigation (14688/452);

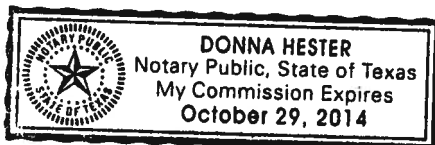
and that the foregoing statements are true and correct to the best of my knowledge.



Sworn to before me this
15 day of October 2012



Notary Public



UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

IN RE BANK OF AMERICA CORP.
SECURITIES, DERIVATIVE, AND
EMPLOYEE RETIREMENT INCOME
SECURITY ACT (ERISA) LITIGATION

Master File
No. 09 MD 2058 (PKC)

ECF CASE

THIS DOCUMENT RELATES TO:
Consolidated Derivative Action

NOTICE OF SETTLEMENT OF STOCKHOLDER DERIVATIVE LITIGATION

TO: ALL RECORD AND BENEFICIAL OWNERS OF BANK OF AMERICA CORP. COMMON STOCK AS OF JUNE 19, 2012, WHO CONTINUE TO OWN SUCH SHARES ("BAC STOCKHOLDERS"):

THIS NOTICE IS GIVEN pursuant to an Order of the United States District Court for the Southern District of New York (the "Court"), to inform you of a proposed stipulated settlement (the "Settlement") in the above-captioned derivative action (the "Action"). The Action involves claims, brought derivatively on behalf of Bank of America Corporation ("BAC"), against certain of its current and former directors alleging violations of Section 14(a) of the Securities Exchange Act of 1934 and certain breaches of fiduciary duty in connection with BAC's acquisition of Merrill Lynch & Co., Inc., which closed on January 1, 2009.

YOU ARE HEREBY NOTIFIED THAT, a hearing will be held on January 11, 2013, at 11:30 a.m., before the Honorable P. Kevin Castel, at the United States District Court for the Southern District of New York, Daniel Patrick Moynihan United States Courthouse, 500 Pearl Street, Courtroom 12C, New York, NY 10007, for the purpose of determining whether the Settlement should be approved as fair, reasonable and adequate. If the Settlement is approved, the Court will hold a separate hearing at a later date to consider an application by Lead Counsel for plaintiffs in the Action for an award of attorneys' fees and for the reimbursement of expenses incurred in the prosecution of the Action. *Because this is a stockholder derivative action brought for the benefit of BAC, no individual BAC Stockholder has the right to receive any individual compensation as a result of the settlement of this action.* In accordance with the terms of the Settlement, and in consideration for certain broad releases, the insurance carriers who provide coverage applicable to the claims asserted in the Derivative Action have agreed to pay, on behalf of Defendants, the sum of \$20 million to BAC, and BAC has agreed to implement certain corporate-governance reforms, including the creation of a new board-level committee to oversee major acquisitions by BAC; modifications to the charter of BAC's disclosure committee to ensure more systematic oversight of the Bank's acquisition-related disclosures; changes to BAC's corporate governance guidelines related to director education requirements for BAC directors; and amendments to the charter of the Enterprise Risk Committee (ERC) of the BAC board of directors relating to the attendance of certain corporate officers at ERC meetings.

IF YOU ARE AN OWNER OF BAC COMMON STOCK, YOUR RIGHTS MAY BE AFFECTED BY THE SETTLEMENT.

This notice contains only a summary of the Action and the terms of the Settlement. If you are a current BAC Stockholder, you may obtain a copy of a detailed Notice of Settlement of Stockholder Derivative Litigation describing the Action, the proposed Settlement, and the rights of BAC Stockholders with regard to the Settlement, as well as a copy of the Stipulation of Settlement, by visiting the website www.bankofamericaderivativesettlement.com, or by calling (866) 220-1326. Should you have any other questions regarding the proposed Settlement or the Action, please contact Lead Counsel for Plaintiffs:

Lewis S. Kahn, Esq.
Michael A. Swick, Esq.
Albert M. Myers, Esq.
Kahn Swick & Foti, LLC
206 Covington Street
Madisonville, Louisiana 70447
(504) 455-1400

Joseph E. White, III, Esq.
Saxena White P.A.
2424 N. Federal Highway, Suite 257
Boca Raton, Florida 33431
(561) 394-3399

Any objection to the Settlement must be filed with the Clerk of the Court (Honorable P. Kevin Castel, United States District Court, Southern District of New York, 500 Pearl Street, New York, NY 10007) in this case numbered 09 MD 2058 (PKC), no later than November 27, 2012, and served by hand or first class mail (postage prepaid) for delivery by the same date on Plaintiffs' Counsel (at the address listed above) and on counsel for Defendants (at the address listed below):

Lawrence Portnoy, Esq.
Charles S. Duggan, Esq.
Brian M. Burnovski, Esq.
Davis Polk & Wardwell LLP
450 Lexington Avenue
New York, New York 10017

PLEASE DO NOT CALL OR WRITE THE COURT REGARDING THIS NOTICE.

DATED: October 12, 2012

BY ORDER OF THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

Exhibit QQ-1

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

----- x
IN RE BANK OF AMERICA CORP.
SECURITIES, DERIVATIVE, AND
EMPLOYEE RETIREMENT INCOME
SECURITY ACT (ERISA) LITIGATION
----- x

Master File
No. 09 MD 2058 (PKC)

ECF Case

----- x
THIS DOCUMENT RELATES TO

Consolidated Derivative Action
----- x

DECLARATION OF PROFESSOR ANIL SHIVDASANI

I, Anil Shivdasani, declare as follows:

1. Attached as Exhibit A to this Declaration is a true and correct copy of my expert report bearing today's date, which accurately sets forth the opinions to which I would testify at trial in connection with the above-captioned action.

2. I declare under penalty of perjury that the foregoing is true and correct.

Executed on November 1, 2012.



Anil Shivdasani

Exhibit A

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

----- x

IN RE BANK OF AMERICA CORP.
SECURITIES, DERIVATIVE, AND
EMPLOYEE RETIREMENT INCOME
SECURITY ACT (ERISA) LITIGATION

:
:
:
:
:
:
:

Master File
No. 09 MD 2058 (PKC)

ECF Case

----- x

THIS DOCUMENT RELATES TO

Consolidated Derivative Action

:
:
:
:
:
:
:
:

----- x

Expert Report of Professor Anil Shivdasani

November 1, 2012

Table of Contents

I.	Qualifications and Assignment.....	1
II.	Summary of Opinions.....	3
III.	The Merger of Bank of America and Merrill Lynch was Driven by Long-Term Strategic Considerations.....	5
A.	The Transaction should be evaluated from a long-term perspective.	5
B.	The long-term strategic benefits of the Transaction were substantial.	9
1.	The complementary lines of business of Bank of America and Merrill Lynch provided a strong strategic rationale for a merger.	9
2.	A merger with Merrill Lynch strengthened Bank of America's investment banking and wealth management capabilities, as well as its international footprint.	12
3.	The Transaction offered Bank of America the potential for sizeable cost savings.....	15
C.	The financial crisis provided an opportunity for Bank of America to purchase Merrill Lynch at a historically low price.	16
IV.	The J.C. Flowers Fairness Opinion.....	18
A.	J.C. Flowers' Discounted Cash Flow analysis.....	19
B.	J.C. Flowers' Comparable Company analysis.....	22
C.	J.C. Flowers' Comparable Transaction analysis.....	23
D.	Merrill Lynch's value as of the merger agreement.....	24
V.	Methodology to Calculate Merrill Lynch's Value Following the Transaction Announcement.....	25
VI.	The Estimated Value of Merrill Lynch Was Higher than the Implied Cost of the Transaction as of the Shareholder Vote.	26
A.	DCF valuation of Merrill Lynch as of the shareholder vote.....	27
1.	Earnings projections as of December 4, 2008.....	27
2.	Cost of equity estimate as of December 4, 2008.....	29
3.	Additional adjustments to the DCF model for the valuation as of the shareholder vote date.....	33
4.	Sensitivity analyses to the DCF valuation of Merrill Lynch as of the shareholder vote.....	36
5.	Merrill Lynch's value as of the shareholder vote based on DCF analysis.....	37
B.	Comparable Company valuation of Merrill Lynch as of the shareholder vote.....	37

1.	Updated J.C. Flowers Comparable Company analysis as of the shareholder vote	38
2.	Revisions to J.C. Flowers analysis with respect to the choice of valuation multiples.....	38
3.	Sensitivity check with respect to the choice of J.C. Flowers' comparable company group.....	40
4.	Merrill Lynch's value as of the shareholder vote based on Comparable Company analysis	41
C.	Comparable Transaction valuation of Merrill Lynch as of the shareholder vote .	41
D.	Merrill Lynch's value as of the shareholder vote	43
VII.	The Estimated Value of Merrill Lynch Was Higher than the Implied Cost of the Transaction as of the Completion of the Merger	43
A.	Adjustments to the valuation approaches to value Merrill Lynch as of the completion of the merger.....	43
B.	The value of Merrill Lynch as of the completion of the merger.....	48
VIII.	Conclusions.....	48

I. Qualifications and Assignment

1. I am the Wachovia Distinguished Professor of Finance at the Kenan-Flagler Business School at the University of North Carolina at Chapel Hill. I am also the Director of the Wachovia Center for Corporate Finance at the University of North Carolina and was the Chairman of the Finance Area at the Kenan-Flagler Business School from 2004 to 2007. Prior to these appointments, I was a Professor of Finance and Associate Professor of Finance at the University of North Carolina from 1998 to 2001. I received my PhD in finance from Ohio State University and my BA in economics with honors from Delhi University.
2. In addition to my academic appointments, I have worked as a Managing Director in the Investment Banking Division of Citigroup Global Markets Inc. (formerly Salomon Smith Barney) from 2008 to 2009 and as a Vice President in the Investment Banking Division of Salomon Smith Barney from 2001 to 2003. Between 2004 and 2007, I worked as a consultant to Citigroup Global Markets. Since 2009, I have been a Senior Advisor in the Investment Banking Division of Citigroup Global Markets. During my academic career, I have also served as an independent consultant and advisor to various corporations and government entities on mergers and acquisitions ("M&A") and other strategic corporate finance matters. For example, I recently served as an independent financial and M&A advisor to the U.S. Navy in its evaluation of Northrop Grumman's spinoff of Huntington Ingalls Industries.
3. My areas of expertise include corporate valuation, mergers and acquisitions, capital structure, corporate restructurings, financing strategies, and corporate governance. I have authored more than 20 corporate finance articles on these topics that have been published in the leading peer-reviewed academic journals in finance. I teach graduate-level courses on Mergers, Acquisitions, and Corporate Restructuring at the University of North Carolina. I have served as a Director of the Financial Management Association and have held appointments on several journal editorial boards, including positions as an associate editor of the *Journal of Finance*, the *Review of Financial Economics*, the *Journal of Corporate Ownership and Control*, and the *North American Journal of Economics and Finance*, and I

am an Emeritus Associate Editor of *Financial Management*. I have also published several articles in practitioner-focused journals such as the *Harvard Business Review* (forthcoming) and the *Journal of Applied Corporate Finance*, and my research has been discussed in the public press, including in *The New York Times*, *The Economist*, *Financial Times*, *Sloan Management Review*, *Business Week*, *CFO Magazine*, *Treasury and Risk Management*, *Reuters Merger Week*, and *Directorship*. I have given numerous talks at various national and international conferences and other venues on mergers and acquisitions, valuation, corporate governance, and related areas.

4. As a Managing Director of Citigroup Global Markets Inc., I advised companies on strategic financial issues including mergers and acquisitions, valuation, capital structure, credit ratings, financial policy, liquidity management, acquisition financing, convertible instruments, pensions, and corporate governance. I have worked on numerous M&A and capital market financing assignments, and my transactional experience includes IBM's acquisition of PwC Consulting, which received the Investment Dealer Digest Award for Best Technology Deal of the Year in 2002. My work at Citigroup focused on clients in the banking, financial services, industrial, and technology sectors. During my time with Citigroup, I wrote several widely-circulated investment banking reports on corporate finance topics including mergers and acquisitions, corporate restructurings, the credit crisis, banking sector turmoil, sovereign wealth funds, hedge fund activism, private equity, initial public offerings, share buybacks, dividend policy, and hybrid securities.
5. A copy of my curriculum vitae is attached as **Appendix A**, which includes my publications over the last ten years. A list of all cases in which I have provided testimony in the last four years is attached as **Appendix B**.
6. I have been retained by counsel for Defendants to evaluate whether, following the announcement of Bank of America's merger with Merrill Lynch (the "Transaction") on September 15, 2008, the Transaction remained a value-enhancing proposition for Bank of America as of December 5, 2008 (the date of the shareholder vote on the merger) and January 1, 2009 (the date of the completion of the Transaction).

7. In formulating my opinions and preparing this report, I have relied on my background and experience and the materials listed in **Appendix C**.
8. The analyses and opinions expressed in this report are my own. I am being compensated for my time and services at my hourly rate of \$850. My compensation in this matter is not dependent on the opinions expressed in this report or the outcome of this litigation. I have received and anticipate that I may receive in the future compensation from Cornerstone Research ("Cornerstone"), the firm that assisted me in this matter. Cornerstone's payments are made entirely at Cornerstone's discretion and are based on my services for and work with Cornerstone, including fees to Cornerstone generated on matters in which they assist me. I understand that those payments are not based on my opinions or the outcome of any matter. I also understand that Cornerstone is being compensated at hourly rates from \$220 to \$575 for assisting me in this matter and that this compensation is not dependent on my opinions or the outcome in this matter. My work on this matter is ongoing. I understand that discovery in this matter is ongoing, and I reserve the right to supplement my opinions in the event that I become aware of additional facts, information, or contentions of the parties or witnesses.

II. Summary of Opinions

9. Based on the documentary evidence produced in this matter, my academic and industry experience, and the results of my analyses as presented in this report, I conclude that:
 - a) In rendering its Fairness Opinion for the Transaction, J.C. Flowers & Co. LLC ("J.C. Flowers") adopted three valuation methodologies that are well accepted for the valuation of financial services companies in the context of mergers and acquisitions. These include the discounted cash flow ("DCF"), comparable company ("Comparable Company"), and comparable transaction ("Comparable Transaction") valuation analyses. Therefore, in order to determine whether the Transaction was value-enhancing to Bank of America as of the shareholder vote (December 5, 2008) and as of the completion of the Transaction (January 1, 2009), I first

updated the inputs into the J.C. Flowers valuation models and estimated updated values for Merrill Lynch on each of these dates. To ensure the robustness of the conclusions and to account for the changing market environment following the Transaction's announcement on September 15, 2008, I also considered certain revisions to the J.C. Flowers models.

- b) As of the shareholder vote on December 5, 2008, the updated J.C. Flowers analyses, summarized in Exhibit 1, show that the estimated value of Merrill Lynch was \$16.04 per share, exceeding the implied cost of the Transaction of \$12.33 per share. My revision to the J.C. Flowers analyses, summarized in Exhibit 2, shows that the estimated value of Merrill Lynch was \$18.07 per share, exceeding the implied cost of the Transaction of \$12.33 per share. Therefore, both the updated J.C. Flowers analyses and my revision to those analyses show that, as of the shareholder vote, the Transaction was value-enhancing to Bank of America.
- c) As of the completion of the merger on January 1, 2009, the updated J.C. Flowers valuation analyses, summarized in Exhibit 3, show that the estimated value of Merrill Lynch was \$16.09 per share, exceeding the implied cost of the Transaction of \$12.10 per share. My revision to the J.C. Flowers analyses, summarized in Exhibit 4, shows that, as of the completion of the merger, the estimated value of Merrill Lynch was \$15.24 per share, exceeding the implied cost of the Transaction of \$12.10 per share. Therefore, both the updated J.C. Flowers and my revised analyses show that, as of the completion of the merger, the Transaction was value-enhancing to Bank of America.
- d) The above analyses are summarized in Exhibits 5 and 6, which compare the estimated value of Merrill Lynch based on the J.C. Flowers models and my own revisions, respectively, to the cost of the Transaction to Bank of America as of the two dates on which I have valued the Transaction. Both exhibits show that the estimated value of Merrill Lynch exceeded the

implied cost of the Transaction to Bank of America on each of the two valuation dates that I considered. I therefore conclude that, following the announcement of the Transaction on September 15, 2008, the Transaction remained value-enhancing to Bank of America as of the date of the shareholder vote and the date of the completion of the Transaction.

III. The Merger of Bank of America and Merrill Lynch was Driven by Long-Term Strategic Considerations.

A. The Transaction should be evaluated from a long-term perspective.

10. Evaluating a merger or an acquisition from an acquirer's perspective requires assessing the potential benefits from the transaction against the potential costs and risks associated with the transaction. Such an evaluation therefore needs to consider the expected benefits from the transaction—such as cash flows from the target firm and synergies/cost savings resulting from the combination of businesses—and the costs and risks associated with achieving those cash flows and synergies/cost savings and implementing the merger integration process. The net effects of these benefits and costs need to be evaluated against the value of the consideration paid by the acquirer to determine whether the acquisition represents a value-enhancing transaction for its shareholders. Because these various benefits and costs occur over different periods of time, the valuation approach should be based on a time horizon that is sufficiently long to capture their effects.
11. M&A in the financial services industry is typically driven by long-term strategic considerations. Such strategic considerations include expansion into new markets and geographies, enhancement of product offerings and business capabilities, opportunities for cross-selling products, economies of scale and scope, operating efficiencies, and diversification of revenue streams across business segments and geographically.¹ These strategic considerations go beyond financial considerations of the sort one might focus on if the acquisition were solely of a portfolio of financial assets. In the context of financial

¹ Ingo Walter (2004), *Mergers and Acquisitions in Banking and Finance*, Oxford University Press, pp. 60–84.

institutions M&A, expansion of company size, geographic reach, product offerings, and revenue diversification are seen as desirable because they offer the potential for a buyer to achieve a more stable earnings profile and are also typically viewed favorably by credit rating agencies and may help the buyer achieve lower funding costs. As I explain in the next section, Bank of America's merger with Merrill Lynch was driven by similar considerations.

12. Management of Bank of America and Merrill Lynch approached the Transaction with a long-term perspective, focusing on the strategic fit between the two companies and the substantial long-term benefits. During a September 15, 2008 conference call with investors, Bank of America CEO Ken Lewis emphasized that the merger with Merrill Lynch "was a unique opportunity to acquire a high quality company that will not only greatly enhance [Bank of America's] **long-term** prospects, but truly creates a firm that is unparalleled in the industry."² (Emphasis added)
13. In any M&A transaction involving long-term merger benefits, there are short-term risks and challenges that need to be managed related to the consolidation of businesses, assets, and corporate cultures.³ An M&A transaction is a value-enhancing proposition for the acquirer when the net effect of its long-term benefits and the costs associated with the short-term risks and challenges exceeds the purchase price of the transaction. Short-term risk factors were present in the Transaction, as it occurred during a period of significant uncertainty and stress in the financial markets, and were disclosed by Bank of America and Merrill Lynch in their joint proxy statement filed on November 3, 2008. Among other things, the joint proxy statement noted that the merger could be affected by "the extent and

² See "Bank of America Corporation acquires Merrill Lynch & Co., Inc. Conference Call - Final," September 15, 2008, FD (FAIR DISCLOSURE) WIRE. Mr. Lewis repeatedly mentioned during this call the fact that Bank of America was considering the long-term merits of the transaction. For example, "[t]he partnership with Merrill Lynch and 60,000 employees is an ideal long-term fit for Bank of America." Similarly, Bank of America CFO Joe Price stated on the same call that "[t]he advantage a company like Bank of America has is that with our strength, diversity and scale, we can continue to manage through today's tough environment and still be positioned to take advantage of rare opportunities to expand our franchise for the long-term benefit of shareholders." (Ibid.) Additionally, after the completion of the Transaction, Bank of America stressed that it should "turn [its] attention to consolidating and recognizing the long-term strategic benefits of the two companies." See "Q4 2008 Bank of America Corporation Earnings Conference Call - Final," January 16, 2009, FD (FAIR DISCLOSURE) WIRE.

³ Ingo Walter (2004), *Mergers and Acquisitions in Banking and Finance*, Oxford University Press, pp. 99-152.

duration of continued economic and market disruptions and governmental regulatory proposals to address these disruptions.”⁴

14. Integration and consolidation risks were also listed in the joint proxy statement: “the merger may be more expensive to complete than anticipated, including as a result of unexpected factors or events; the integration of Merrill Lynch’s business and operations with those of Bank of America may take longer than anticipated, may be more costly than anticipated and may have unanticipated adverse results relating to Merrill Lynch’s or Bank of America’s existing businesses; the anticipated cost savings and other synergies of the merger may take longer to be realized or may not be achieved in their entirety, and attrition in key client, partner and other relationships relating to the merger may be greater than expected.”⁵
15. Equity research analysts also noted risks and challenges associated with the merger of Bank of America and Merrill Lynch.⁶ Still, analysts viewed the long-term strategic prospects for the merger positively, describing Merrill Lynch and its retail brokerage business as a “trophy franchise”⁷ and “the crown jewel for BAC,”⁸ and predicting that the combined entity would “emerge over time as one of the winning handful of mega-banks in the new, post-crisis banking order.”⁹
16. The presence of short-term risks does not imply that an M&A transaction is not a value-enhancing proposition for the acquirer. To appropriately evaluate an M&A transaction, one needs to consider whether the potential long-term benefits are large enough to compensate for the short-term integration costs and other financial risks. Therefore, one

⁴ Bank of America Form DEFM14A (Definitive Proxy Statement), filed November 3, 2008, p. 22.

⁵ Bank of America Form DEFM14A (Definitive Proxy Statement), filed November 3, 2008, p. 22.

⁶ Todd L. Hagerman, Jill Glaser, and Vaibhav Bajpai, “Bank of America/Merrill Lynch – A Watershed Event,” Credit Suisse, September 15, 2008. Mike Mayo and Chris Spahr, “Bank of America Corp: Acquiring Merrill Lynch – Quick Take,” Deutsche Bank, September 15, 2008.

⁷ David A. George, Michael C. Behan, and Garrett A. Holland, “Merrill Deal Has Strategic Merit, Risk/Reward Looking More Interesting,” Baird, September 16, 2008.

⁸ Vivek Juneja, Thomas W. Curcuruto, and Jeanne H. Sun, “MER: Long Term Opportunity, Expensive Acquisition,” JPMorgan, September 17, 2008.

⁹ Matthew Czepliwicz, “Merrill Lynch Flashnote,” HSBC, October 1, 2008.

needs to take a long-term perspective in analyzing the benefits to the acquiring firm and its shareholders. For example, it can be misleading to judge the attractiveness of an M&A transaction based on the acquirer's stock price performance at the announcement or immediately after the transaction's completion.¹⁰ Academic studies show that M&A transactions in the financial services industry can generate substantial benefits in the long-term, often exceeding the acquirer's expectations.¹¹ This academic evidence is consistent with my own client advisory experience in investment banking, where I have observed that it often takes time for the merger benefits to materialize and get reflected in the acquiring firm's operating results and share price performance and that the acquiring firm may underperform in the short term prior to the realization of long-term benefits.

17. Since Bank of America sought long-term strategic benefits in the merger with Merrill Lynch, it is important to take a long-term view when evaluating the impact of the merger on Bank of America. As I explain in more detail later in this report, the valuation techniques that I used, Discounted Cash Flow and Comparable Company analyses, are consistent with a long-term view, as they consider all the cash flow effects associated with the Transaction. I compared the value of Merrill Lynch estimated using these techniques to the implied cost of the Transaction to Bank of America. This allowed me to assess whether the Transaction was expected to be value enhancing and hence expected to increase the long-term stock price of the Bank. It is also customary to calculate whether an acquisition is expected to be accretive or dilutive to the acquirer's earnings. While an accretion/dilution analysis describes the effect of a transaction on projected earnings in the short-term, it is misleading to judge the attractiveness of an acquisition solely on that basis. For example, an accretion/dilution analysis is typically conducted for the first one to three years of future earnings and does not reflect any long-term value that is added beyond that period. For the Transaction, Bank of America projected that it would take four years to realize the full extent of cost savings; an accretion/dilution analysis for the first three years

¹⁰ For example, see Charles W. Calomiris and Jason Karceski (2000), "Is the Bank Merger Wave of the 1990s Efficient? Lessons from Nine Case Studies," *Mergers and Productivity* (S. Kaplan ed.), pp. 93–177.

¹¹ For example, see Joel F. Houston, Christopher M. James, and Michael O. Ryngaert (2001), "Where Do Merger Gains Come From? Bank Mergers From the Perspective of Insiders and Outsiders," *Journal of Financial Economics* Vol. 60, pp. 285–331.

would not reflect the entire value of the benefits expected to be gained from the Transaction.

B. The long-term strategic benefits of the Transaction were substantial.

1. The complementary lines of business of Bank of America and Merrill Lynch provided a strong strategic rationale for a merger.

a) Bank of America's lines of business

18. Bank of America is one of the world's largest financial institutions, offering banking and non-banking financial services in the United States and abroad. The Bank's business segments in 2008 included Global Wealth and Investment Management ("GWIM"), Global Corporate and Investment Banking ("GCIB"), and Global Consumer and Small Business Banking ("GCSBB");¹² the GCSBB segment accounted for approximately 70 percent of the Bank's total revenue in the first half of 2008.¹³
19. Decades of expansion through mergers and acquisitions transformed the Bank from a regional banking organization into an institution with a footprint covering more than 82 percent of the U.S. population by the end of 2008.¹⁴ Exhibit 7 shows that during the 14 years prior to the Transaction, Bank of America was the second most acquisitive U.S. company with approximately \$187.4 billion in total value of transactions in excess of \$1 billion each. Ranked by the number of transactions in excess of \$1 billion, it was the fourth most acquisitive company with nine such transactions since 1995. Within the financial

¹² Bank of America Form 10-K, filed February 27, 2009, p. 1. The GCSBB segment generates revenues through net interest spreads on deposit products; fees; card services; and mortgage, home equity, and insurance services. (Bank of America Form 10-K, filed February 27, 2009, pp. 28–30.)

¹³ "Creating the Premier Financial Services Company in the World," SEC Form 425, filed September 15, 2008, p. 10.

¹⁴ In 1960, Security National Bank of Greensboro and American Commercial Bank of Charlotte merged to become North Carolina National Bank. The Bank expanded beyond North Carolina in the 1980s and 1990s, purchasing Florida- and Texas-based banks and later renaming itself as NationsBank. In 1998, NationsBank acquired San Francisco-based BankAmerica Corp and took the new name of Bank of America. The combined institution was the first coast-to-coast retail banking franchise in the nation. The Bank continued its nationwide expansion with the 2004 acquisition of FleetBoston Financial, the fifth largest bank in the nation. Bank of America acquired MBNA in 2006, making the Bank the leading credit card issuer in the U.S. In 2007, Bank of America enhanced its Midwest presence with the purchase of Chicago-based LaSalle Bank. See "Bank of America Heritage: Merger History," <http://message.bankofamerica.com/heritage/merger-history>; Bank of America Form 10-K, filed February 27, 2009, p. 1.

services industry, Bank of America is well understood to be a highly experienced buyer of companies and has developed a long track record of identifying potential acquisition opportunities, evaluating and undertaking them, and integrating the companies that it has acquired.

20. Bank of America's acquisition activities helped expand its geographic reach to 32 states and the District of Columbia, and provided the Bank with approximately 59 million consumer and small business clients in the U.S.¹⁵ These acquisitions primarily contributed to the Bank's retail banking business, and by 2005, Bank of America operated almost 10 percent of U.S. deposit accounts, close to the national deposit cap on banks operating in the U.S.¹⁶ Consistent with its leading position in U.S. retail banking, Bank of America's more recent merger-related expansion activity has occurred in other related areas of financial services. For example, Bank of America completed the acquisition of U.S. Trust, a wealth management business, in 2007.¹⁷ According to Bank of America and Merrill Lynch's joint proxy statement filed on November 3, 2008, both firms were also considering other potential strategic options around this time, including the possibility of a combination between Bank of America and Merrill Lynch.¹⁸
21. Bank of America was not alone in its strategy of growth through acquisitions. Exhibit 7 shows that two of its closest competitors, Citigroup and JP Morgan, were also very active acquirers. The use of acquisitions is well understood to be a key part of the growth strategy of financial institutions because the financial services industry is a relatively mature segment of the U.S. economy. Based on my professional experience, it is common practice

¹⁵ Bank of America Form 10-K, filed February 27, 2009, p. 28.

¹⁶ According to FDIC data, Bank of America deposits accounted for 9.72 percent of total national deposits as of June 30, 2005, dropping to 9.16 percent and 8.93 percent on June 30, 2006 and June 30, 2007, respectively. Bank of America's share of deposits increased to 9.98 percent as of June 30, 2008. (FDIC Summary of Deposits, <http://www2.fdic.gov/sod/index.asp>.)

¹⁷ "Bank of America Heritage: Merger History," <http://message.bankofamerica.com/heritage/#!/merger-history>.

¹⁸ "Management and the boards of directors of both Bank of America and Merrill Lynch regularly review and consider potential strategic options for their companies in light of their respective performance, business needs and the challenges and opportunities presented by the economic and industry environment. As part of this process, senior management of both companies have met informally from time to time with senior management of other financial institutions, including each other, regarding industry trends and strategic considerations. Among these considerations has been the possibility of a combination of Bank of America and Merrill Lynch." (Bank of America Form DEF14A (Definitive Proxy Statement), filed November 3, 2008, p. 49.)

among major financial institutions to regularly evaluate acquisition opportunities that offer the potential for attractive synergies. Given the complementary nature of the businesses of Bank of America and Merrill Lynch as explained in more detail below, I have considered the combination of these two firms as having the potential to create one of the world's premier financial services firms in terms of product platform and geographic footprint.

b) In 2008, Merrill Lynch operated the nation's strongest brokerage business and an investment banking franchise with a significant international presence.

22. In 2008, Merrill Lynch was "one of the world's leading capital markets, advisory and wealth management companies with offices in 40 countries and territories."¹⁹ At the time of the merger, Merrill Lynch's main business segments included Global Markets and Investment Banking ("GMI") and Global Wealth Management ("GWM"). As of December 26, 2008, Merrill Lynch had approximately \$1.2 trillion in client assets in GWM accounts and a prominent network of financial advisors, whose reputation earned it the nickname of the "thundering herd." Merrill Lynch's GWM business was widely considered to be one of the world's leading brokerage franchises and a "crown jewel" for the company. In addition, Merrill Lynch held a 50 percent stake in BlackRock, Inc., a leading investment management company with \$1.3 trillion in assets under management at the end of 2008.²⁰
23. The Global Markets division of Merrill Lynch's GMI segment engaged in sales and trading for investor clients and on a proprietary basis. The Investment Banking division of GMI offered securities underwritings, private placements, and financial advisory services, including advice on mergers, acquisitions, and restructurings. GWM provided wealth management products and services, such as commission and fee-based investment accounts; banking, lending, and card services; trust and retirement services; and insurance products. In addition, Merrill Lynch provided global research services to support both

¹⁹ Merrill Lynch Form 10-K, filed February 24, 2009, p. 3.

²⁰ Merrill Lynch Form 10-K, filed February 24, 2009, p. 3.

business segments.²¹ In 2007 and 2008, Merrill Lynch's largest source of non-interest revenues was commissions, followed by investment banking in 2007 and managed accounts and other fee-based revenues in 2008.²²

24. Within the investment banking industry, Merrill Lynch was widely recognized as having premier capabilities and was regarded as one of the leading global investment banks, particularly in equity underwriting. Exhibits 8a–b present league tables for underwriters of U.S. equity offerings, global equity and rights offerings, and U.S. and international bonds for 2007 and the first half of 2008. In 2007, Merrill Lynch was the top underwriter for U.S. equity offerings and global equity and rights offerings (in the first half of 2008, Merrill Lynch was ranked 4th and 5th, respectively). Merrill Lynch was also a highly-ranked underwriter for U.S. and international bonds, ranked fourth and fifth in these respective areas in 2007 (5th and 8th, respectively, in the first half of 2008). Bank of America highlighted Merrill Lynch's investment banking capabilities as part of the rationale for the merger in its September 15, 2008 investor presentation.²³

2. A merger with Merrill Lynch strengthened Bank of America's investment banking and wealth management capabilities, as well as its international footprint.

25. On the morning of Saturday, September 13, 2008, Merrill Lynch CEO John Thain approached Bank of America CEO Ken Lewis to discuss a potential transaction between the two firms. The merger agreement was reached early in the morning on September 15, 2008 and publicly announced later that day.²⁴ According to Bank of America and Merrill Lynch's joint proxy statement filed on November 3, 2008, one of the factors that led the two firms to pursue the merger was "the fact that the complementary nature of the respective customer bases, business products and skills of Bank of America and Merrill

²¹ Merrill Lynch Form 10-K, filed February 24, 2009, pp. 3–4.

²² Merrill Lynch Form 10-K, filed February 24, 2009, p. 22.

²³ "Creating the Premier Financial Services Company in the World," SEC Form 425, filed September 15, 2008. Page 6 highlights Merrill's contribution to the Bank's investment banking capabilities in "Global Debt Underwriting," "Global Equities," and "Global M&A Advisory."

²⁴ Bank of America Form DEFM14A (Definitive Proxy Statement), filed November 3, 2008, p. 49–51.

Lynch is expected to result in substantial opportunities to distribute products and services to a broader customer base and across businesses and to enhance the capabilities of both companies.”²⁵

26. As noted above, business line diversification is an important strategic rationale for M&A activity in the financial services industry. In addition to creating a more stable earnings profile for the combined company, diversification of revenues is viewed favorably by credit rating agencies and can help support or enhance the company’s credit rating. The credit rating implications are particularly important for a financial institution since its profitability is directly linked to its financing costs. Consistent with this theme, diversification of the business lines was also an important strategic consideration for Bank of America in the Transaction. The merger provided Bank of America with an opportunity to diversify its revenues across business segments. As I mentioned earlier, Bank of America’s business was highly concentrated in the Global Consumer & Small Business Banking segment, which accounted for 70 percent of the Bank’s total revenues before the merger. The Bank expected that, after the merger, its revenue streams would be more diversified across its business segments: the GCSBB segment would account for 48 percent of the Bank’s total revenues (down from 70 percent), GCIB would account for 32 percent (up from 24 percent), and GWIM would account for 20 percent (up from 6 percent).²⁶
27. Geographic diversification and a larger international footprint were additional strategic benefits pursued by Bank of America with this merger.²⁷ Relative to its two major competitors, Citigroup and JP Morgan, Bank of America had a lower level of international diversification and a lower exposure to the faster growing emerging markets. Exhibit 9 shows the geographic distribution of Bank of America’s net revenues for the fiscal year of 2007 in comparison to Citigroup and JP Morgan. The exhibit shows that Bank of America’s revenues were generated primarily within the U.S. and Canada, with only 10

²⁵ Bank of America Form DEFM14A (Definitive Proxy Statement), filed November 3, 2008, pp. 54–55.

²⁶ “Creating the Premier Financial Services Company in the World,” SEC Form 425, filed September 15, 2008, p. 10.

²⁷ The Investor Presentation highlights Merrill Lynch’s global footprint with regard to its investment banking and wealth management divisions. (“Creating the Premier Financial Services Company in the World,” SEC Form 425, filed September 15, 2008, pp. 6, 12 and 13.)

percent of its net revenues derived from international markets. In contrast, Citigroup derived 54 percent of its net revenues from outside the U.S. and Canada, while JP Morgan derived 26 percent of its net revenues from outside the U.S. and Canada. The exhibit shows that adding Merrill Lynch would allow Bank of America to increase its share of net revenues generated internationally from 10 percent to 19 percent. In addition, the merger with Merrill Lynch would allow Bank of America to increase its presence in fast-growing emerging markets such as India, Brazil, and Russia.²⁸ Thus, the international exposure of Merrill Lynch's business and its operations in emerging markets provided an attractive platform for Bank of America to achieve a more global footprint.

28. While Bank of America was widely seen as the leading domestic retail banking organization in the U.S., its capabilities in wealth management and investment banking were generally viewed to be relatively weaker. Thus, the acquisition of Merrill Lynch's retail brokerage and wealth management business provided an opportunity for Bank of America to enhance its market position in these areas and to do so in a manner not feasible by almost any other acquisition that Bank of America could consummate. Consistent with this, Bank of America noted the strength of Merrill Lynch's retail brokerage and wealth management business along with Merrill Lynch's global scale in investment management as important strategic benefits of the Transaction.²⁹ The addition of a premier wealth management franchise to Bank of America's leading capabilities in retail banking, credit cards, and home lending was seen as strengthening the important relationship between cornerstone products offered by Bank of America.³⁰
29. In testimony before the New York Attorney General ("NYAG"), Joe Price, then Chief Financial Officer of Bank of America, described the strategic benefits of the merger:

²⁸ "Creating the Premier Financial Services Company in the World," SEC Form 425, filed September 15, 2008, p. 13.

²⁹ "Creating the Premier Financial Services Company in the World," SEC Form 425, filed September 15, 2008, pp. 5, 6, 10, 14.

³⁰ "Creating the Premier Financial Services Company in the World," SEC Form 425, filed September 15, 2008, pp. 5, 6, 8, 14.

“At a very high level, our wealth management division, we had been trying to build a financial advisor work force. This catapulted us into having one of the largest and, what we believe, to be one of the best-run advisory work forces that we feel is a missing piece of our wealth management business. It brought an equities platform that was, in our view, far stronger than our existing equities platform, some international reach on our banking and markets side that we, again, had some but not near the strength there, and we felt the combination of that with our existing customer base and our existing market shares and positions and size and strength of our businesses were a great fit.”³¹

30. Many analysts concurred with Bank of America on the strategic benefits of the Transaction. For example, Credit Suisse analysts wrote that “BAC’s potential synergies with MER’s private wealth management and retail brokerage business are substantial. MER’s global wealth management franchise (\$1,605B AUM) will serve to complement BAC’s expansive retail franchise.”³² A Morgan Stanley report noted that the Transaction “fits 2 key holes at BAC: international investment banking and domestic retail broking.”³³ These observations are consistent with my views that there were significant long-term strategic benefits to Bank of America from the merger with Merrill Lynch due to its strength in wealth management, its strength in equities underwriting, and the global nature of its investment banking franchise and that the addition of these platforms would position Bank of America as a premier global financial institution with respect to product capabilities and geographic coverage.

3. The Transaction offered Bank of America the potential for sizeable cost savings.

31. In addition to the strategic benefits, the merger of Bank of America and Merrill Lynch provided the combined company with opportunities to achieve cost savings due to the complementary nature of the firms’ lines of business. Bank of America estimated that the

³¹ Testimony of Joe Price, *In Re Executive Compensation Investigation, Bank of America – Merrill Lynch*, March 16, 2009, 23:7–21.

³² Todd L. Hagerman, Jill Glaser, and Vaibhav Bajpai, “Bank of America/Merrill Lynch – A Watershed Event,” Credit Suisse, September 15, 2008.

³³ Betsy L. Graseck, Patrick Pinschmidt, and Cheryl M. Pate, “MER Acquisition a Strategic Positive, but Asset Valuation Is Key Factor,” Morgan Stanley, September 15, 2008.

fully-realized annual pre-tax cost savings would be \$7 billion, approximately 24 percent of Merrill Lynch's expense base.³⁴ The cost savings would result from the reduction or elimination of "overlapping business and infrastructure, corporate staff functions, occupancy and other cost savings from miscellaneous items."³⁵ Bank of America's cost savings estimate for the Transaction was within the range of cost savings as a percentage of the target's expense base that the Bank had projected in previous large acquisitions, such as the acquisitions of LaSalle Bank (where Bank of America projected cost savings of 51 percent of the target's expense base), MBNA (where Bank of America projected cost savings of 24 percent), and FleetBoston (where Bank of America projected cost savings of 27 percent).³⁶ With its experience in integrating acquisitions, Bank of America had an established track record of successfully implementing planned cost savings strategies.

32. In connection with the Transaction, Bank of America estimated that it would incur integration costs of \$3 billion on a pre-tax basis for expenses related to severance and closure of facilities and elimination of other duplicative operations. Roughly half of these integration costs were expected to be capitalized, increasing the goodwill resulting from the acquisition.³⁷

C. The financial crisis provided an opportunity for Bank of America to purchase Merrill Lynch at a historically low price.

33. Bank of America's management and industry participants had long recognized the strategic rationale for a merger between Bank of America and Merrill Lynch. For example, as

³⁴ Bank of America Form DEFM14A (Definitive Proxy Statement), filed November 3, 2008, p. 55; Merrill Lynch Form 10-K, filed February 24, 2009, p. 52.

³⁵ Bank of America Form DEFM14A (Definitive Proxy Statement), filed November 3, 2008, p. 55. Similarly, analysts anticipated that savings would be "centered around headcount reductions across both platforms incl. overlapping back-office and support functions as well as vendor leverage [and that] [r]eal estate [would] also be optimized." (Mike Mayo and Chris Spahr, "Bank of America Corp: Acquiring Merrill Lynch – Post Conf. Call Analysis," Deutsche Bank, September 16, 2008.)

³⁶ After-tax cost savings estimates were converted to pre-tax figures using a tax rate of 37 percent. (Bank of America press release titled "Bank of America Agrees to Acquire LaSalle Bank," April 23, 2007; Bank of America presentation titled "Bank of America Acquires LaSalle Bank," April 23, 2007, p. 18; Bank of America Form S-4/A (MBNA Merger Proxy Statement), filed September 19, 2005, p. 22; Exhibit 13 to MBNA Form 10-K, filed March 15, 2005, p. 18; Bank of America Form S-4/A (FleetBoston Merger Proxy Statement), filed February 6, 2004, p. 111; FleetBoston Financial Form 10-K, filed March 2, 2004, p. 11.)

³⁷ Bank of America Form DEFM14A (Definitive Proxy Statement), filed November 3, 2008, p. 47.

mentioned earlier, Bank of America and Merrill Lynch's joint proxy statement describes that executives from both firms had met from time to time with senior management of other financial institutions, including each other, to discuss strategic considerations, including the possibility of a transaction.³⁸ In the conference call announcing the merger, Bank of America CFO Joe Price stated: "we competed against Merrill Lynch and have known them well for years in addition to discussing business opportunities several times."³⁹ Moreover, within the industry, Bank of America was considered to be a logical buyer of Merrill Lynch. For example, J.C. Flowers Chairman J. Christopher Flowers explained in his testimony that "Bank of America had been interested in doing a transaction with Merrill for years, so that general idea was nothing new."⁴⁰

34. Exhibit 10 shows the ratio of Merrill Lynch's stock price to Bank of America's stock price from January 2004 to December 2008. The exhibit shows that, due to the severe market dislocations at the time, Merrill Lynch's stock price relative to Bank of America's stock price depreciated sharply in the second half of July 2008. Between January 1, 2004 and July 15, 2008 the ratio of Merrill Lynch's stock price to Bank of America's stock price averaged 1.43, but by September 12, 2008 that ratio had declined to 0.51. This much lower relative price indicates that, on September 12, 2008, an acquisition of Merrill Lynch by Bank of America could be less expensive on a relative basis than had historically been the case. The financial crisis that began in 2007 and escalated in the fall of 2008 created an opportunity for Bank of America to acquire Merrill Lynch at a lower relative price than had been historically possible. All else being equal, a lower relative price increases the degree to which the Transaction would be value-enhancing to Bank of America.⁴¹

³⁸ Bank of America Form DEF14A (Definitive Proxy Statement), filed November 3, 2008, p. 49.

³⁹ "Bank of America Corporation acquires Merrill Lynch & Co., Inc. Conference Call - Final," September 15, 2008, FD (FAIR DISCLOSURE) WIRE.

⁴⁰ Testimony of James Christopher Flowers, *In Re Executive Compensation Investigation, Bank of America – Merrill Lynch*, January 28, 2010, 14:8–10.

⁴¹ A similar view was expressed by participants in the Transaction. See Testimony of David Schamis, *In Re Executive Compensation Investigation, Bank of America – Merrill Lynch*, January 21, 2010, 86:20–87:8.

IV. The J.C. Flowers Fairness Opinion

35. On September 13, 2008, Bank of America asked J.C. Flowers to provide a fairness opinion regarding the proposed transaction with Merrill Lynch.⁴² J.C. Flowers is a well-recognized investment firm that specializes in the financial services sector, and prior to this engagement had conducted its own analysis of Merrill Lynch's assets in December 2007.⁴³
36. Fairness opinions are commonly sought by boards considering mergers, acquisitions, or other change in control events. In rendering a fairness opinion, a financial advisor seeks to determine whether the proposed transaction is fair from a financial point of view. Providing a fairness opinion is not simply the result of mathematically applying certain valuation techniques but requires judgment by the advisor in the selection of the relevant techniques, the choice of appropriate inputs, and the nature of sensitivity analyses that are conducted. The analysis supporting a fairness opinion needs to be considered in its entirety to form a view regarding the financial fairness of a transaction.⁴⁴
37. J.C. Flowers conducted its valuation of Merrill Lynch using three widely-accepted valuation methods that are commonly used by investment banks in rendering fairness opinions: a DCF analysis, a valuation multiples analysis using comparable companies, and a valuation multiples analysis using comparable transactions. Each of these three valuation methods offers certain advantages and limitations and therefore they are commonly used together. For each method, J.C. Flowers identified an upper bound and a lower bound price estimate for Merrill Lynch's shares. Based upon this analysis, J.C. Flowers estimated that, as of September 14, 2008, Merrill Lynch's value was \$35.65 per share, which was \$6.65

⁴² Testimony of James Christopher Flowers, *In Re Bank of America Corporation Stockholder Derivative Litigation*, January 12, 2012, 31:5–32:13. The analyses in the J.C. Flowers Fairness Opinion (JCF-0011811–33) were done in partnership with Fox-Pitt Kelton. I will refrain from referring to both companies for the sake of simplicity.

⁴³ Testimony of James Christopher Flowers, *In Re Executive Compensation Investigation, Bank of America – Merrill Lynch*, January 28, 2010, 37:23–38:17.

⁴⁴ See Bank of America Form DEFM14A (Definitive Proxy Statement), filed November 3, 2008, p. 64: "In connection with rendering their respective opinions, each of FPK and J.C. Flowers performed certain financial, comparative and other analyses as summarized below. The preparation of a fairness opinion is a complex process that involves various determinations as to the most appropriate and relevant methods of financial and comparative analysis and the application of those methods to the particular circumstances. Therefore, such an opinion is not readily susceptible to summary description. Accordingly, each of FPK and J.C. Flowers believe that its analyses must be considered as a whole and that considering any portion of such analyses and factors, without considering all of its analyses and factors as a whole, could create a misleading or incomplete view of the process underlying its opinion."

higher than the implied cost of the Transaction of \$29.00 per share based on Bank of America's September 12, 2008 closing price. The estimated value of \$35.65 per share was calculated as the median value across the upper and lower bound estimates derived from the various valuation methods.

38. As inputs for its valuation analyses, J.C. Flowers used stock price data as of September 12, 2008 and contemporaneous analyst consensus forecasts of Merrill Lynch's net income provided by SNL Financial. Merrill Lynch's book value and tangible book value were based on Merrill Lynch's balance sheet figures for September 30, 2008 as projected by management as of September 12, 2008.⁴⁵ J.C. Flowers also relied on Bank of America's projection that, starting from 2012, the merger would annually provide \$7 billion worth of pre-tax cost savings.⁴⁶

A. J.C. Flowers' Discounted Cash Flow analysis

39. The DCF valuation analysis focuses on the expected future cash flows generated by the assets of the company that is being valued. The value of the company is equal to the present value of those expected future cash flows. One advantage of this valuation method is that it is based on a sufficiently long time horizon that captures the long-term effects of the M&A transaction that is being valued.⁴⁷
40. The key components in the DCF valuation method are the cash flow forecasts, the terminal value, and the discount rate associated with the cash flows that are being valued. Thus, in performing a DCF analysis, it is necessary first to estimate cash flows expected to be

⁴⁵ "N.B.: All MER balance sheet figures based on 9/30/2008 data projected by management." ("Bank of America Corporation Fairness Opinion Presentation," by J.C. Flowers, prepared September 2008 (JCF-0011811-33 at 11819).)

⁴⁶ Bank of America projected that it would take 4 years to realize the full extent of cost savings with 25 percent of the \$7 billion of cost savings to be attained by 2009, 60 percent by 2010, 80 percent by 2011 and 100 percent by 2012. ("Bank of America Corporation Fairness Opinion Presentation," by J.C. Flowers, prepared September 2008 (JCF-0011811-33 at 11818).)

⁴⁷ Finance textbooks have recognized the advantages of DCF as a valuation method. (See Tim Koller, Marc Goedhart, and David Wessels (2005), *Valuation: Measuring and Managing the Value of Companies*, McKinsey & Co., 4th Edition, p. 390: "Of the available valuation tools, discounted cash flow continues to deliver the best results.") Among other things, "[d]iscounted cash flows methods have the advantage that they allow us to incorporate specific information about the firm's cost of capital or future growth." (Jonathan Berk and Peter DeMarzo (2007), *Corporate Finance*, Pearson International Edition, p. 265.)

generated by the firm for the foreseeable future. The estimates regarding future earnings and their growth rates are often based on forecasts by equity research analysts or on management forecasts. Next, the firm's "terminal value" is estimated, typically based on an assumed perpetuity growth rate or an assumed terminal multiple. The terminal value is intended to measure the value of the cash flows that accrue in the periods beyond the earnings forecasts. Finally, since future cash flows, including the terminal value, are subject to uncertainty, they are discounted to the present using a discount rate that reflects the riskiness of the firm's expected future cash flows. The value of the firm is derived by summing the discounted expected future cash flows, including the terminal value.

41. For financial firms, the DCF method is applied to value the equity stake in the firm by calculating the present value of expected future cash flows to the firm's shareholders.⁴⁸ Equity cash flows of a financial firm comprise cash flows that accrue to all common shareholders of the firm and are typically measured by the firm's net income.
42. The DCF analysis performed by J.C. Flowers was based on analyst consensus earnings forecasts for Merrill Lynch provided by SNL Financial.⁴⁹ These forecasts were available only up to 2010. J.C. Flowers assumed that, from 2010 to 2013, Merrill Lynch's net income would grow at an annual rate of 10 percent, in accordance with analyst consensus forecasts for Merrill Lynch's long-term growth rate provided by SNL Financial.⁵⁰ Beyond 2013, J.C. Flowers assumed a perpetuity growth rate of 3 percent per year for Merrill Lynch's earnings.⁵¹

⁴⁸ "[F]inancing decisions...are at the core of how [financial institutions] generate earnings. Therefore, to value financial institutions you should use the equity cash flow method rather than the enterprise DCF method." (Tim Koller, Marc Goedhart, and David Wessels (2005), *Valuation: Measuring and Managing the Value of Companies*, McKinsey & Co., 4th Edition, pp. 681–82.)

⁴⁹ J.C. Flowers estimated Merrill Lynch's 2009 and 2010 earnings by multiplying the analysts' EPS forecasts for those years by the number of fully diluted shares outstanding. (JCF-0008114.)

⁵⁰ "Bank of America Corporation Fairness Opinion Presentation," by J.C. Flowers, prepared September 2008 (JCF-0011811–33 at 11818). The long-term growth rate refers to the growth rate over the next 3–5 years. This is distinct from the perpetuity growth rate, which is used to calculate the terminal value.

⁵¹ "Bank of America Corporation Fairness Opinion Presentation," by J.C. Flowers, prepared September 2008 (JCF-0011811–33 at 11821).

43. In addition to these net income forecasts for Merrill Lynch obtained from SNL Financial, J.C. Flowers also used Bank of America's forecast of annual cost savings from the Transaction and assumed that these would remain constant after 2013.⁵² J.C. Flowers adjusted the pre-tax merger cost savings for items such as revenue overlap, amortization of debt, and revenue synergies, and then applied a 37 percent tax rate to the remaining cost savings.⁵³ J.C. Flowers also included an initial negative after-tax mark-to-market impact of \$6.275 billion in their DCF analysis to account for merger-related costs and purchase accounting marks. J.C. Flowers discounted these forecasted earnings using a discount rate based on the cost of equity of 13 percent, which they estimated using the Capital Asset Pricing Model ("CAPM").^{54, 55}
44. In its DCF analysis, J.C. Flowers conducted a sensitivity analysis with respect to two important inputs, the cost of equity and the perpetuity growth rate, in accordance with the practice of many investment banking firms in rendering fairness opinions. For the cost of equity, J.C. Flowers considered a range of 12 to 14 percent, and for the perpetuity growth rate it considered a range of 2 to 4 percent.⁵⁶
45. Based on the assumptions and inputs discussed above, J.C. Flowers' DCF analysis resulted in an estimated value for Merrill Lynch of between \$32.70 and \$45.96 per share. This range of values for Merrill Lynch's shares included estimated cost savings ranging from \$11.74 to \$14.18 per share.

⁵² J.C. Flowers assumed a 0 percent perpetuity growth rate for cost savings after 2013. ("Bank of America Corporation Fairness Opinion Presentation," by J.C. Flowers, prepared September 2008 (JCF-0011811-33 at 11821).)

⁵³ JCF-0008114.

⁵⁴ "Bank of America Corporation Fairness Opinion Presentation" by J.C. Flowers, prepared September 2008 (JCF-0011811-33 at 11818).

⁵⁵ The CAPM is a widely used method for calculating the cost of equity and requires inputs for the risk-free rate, the firm's equity "beta" and the equity risk premium.

⁵⁶ "Bank of America Corporation Fairness Opinion Presentation," by J.C. Flowers, prepared September 2008 (JCF-0011811-33 at 11821).

B. J.C. Flowers' Comparable Company analysis

46. J.C. Flowers also estimated Merrill Lynch's value based on the valuation multiples of comparable companies.⁵⁷ The comparable company valuation approach infers the value of a firm from the relative valuation of comparable companies that are traded in the marketplace. This approach begins with the identification of publicly-traded comparable companies and the selection of appropriate valuation multiples for these companies.
47. An important aspect of comparable company valuation is the choice of comparable companies since in practice it is uncommon to find two companies that are comparable in all respects. Another important consideration is the inclusion of a sufficient number of comparable companies so that a meaningful inference regarding valuation can be made. In addition, thought is also required about the choice of valuation metrics, since the importance of various financial metrics varies across and within industries, and can vary over time as economic and market conditions change. For financial companies, multiples are usually calculated based on metrics such as earnings,⁵⁸ book value,⁵⁹ and tangible book value,⁶⁰ although their relevance can vary depending on the economic environment and the company under consideration.
48. The J.C. Flowers Fairness Opinion considered five comparable companies: Goldman Sachs, UBS, Credit Suisse, Deutsche Bank, and Morgan Stanley.⁶¹ These companies operated similar lines of business as Merrill Lynch, were of similar size, and were some of

⁵⁷ The academic literature highlights the benefits associated with the comparable companies valuation method:

"Of the available valuation tools, discounted cash flow continues to deliver the best results. However, a thoughtful multiples analysis merits a place in your tool kit as well. When that analysis is careful and well reasoned, it not only provides a useful check of your DCF forecasts but also provides critical insights into what drives value in a given industry." (Tim Koller, Marc Goedhart, and David Wessels (2005), *Valuation: Measuring and Managing the Value of Companies*, McKinsey & Co., 4th Edition, p. 390.)

⁵⁸ The price-to-earnings multiple is typically calculated by dividing the firm's current stock price by the firm's expected earnings per share (EPS).

⁵⁹ The price-to-book value multiple is calculated by dividing the firm's current stock price by the firm's book value per share.

⁶⁰ The price-to-tangible book value multiple is calculated by dividing the firm's current share price by its tangible book value per share. Tangible book value is a measure of the firm's tangible equity capital and is calculated by subtracting goodwill and other intangible assets from the firm's common equity.

⁶¹ "Bank of America Corporation Fairness Opinion Presentation," by J.C. Flowers, prepared September 2008 (JCF-0011811-33 at 11819).

Merrill Lynch's main competitors in the market as underwriters of U.S. and international bond and equity offerings (see Exhibits 8a-b for league tables). In my opinion, the choice of comparable companies by J.C. Flowers appears to be reasonable.

49. To estimate the comparable company value of Merrill Lynch, J.C. Flowers considered four valuation multiples: multiples with respect to book value, tangible book value, and expected earnings for 2009 and 2010.⁶² These valuation multiples are standard multiples used routinely by equity analysts as well as by investment banks in the context of fairness opinions. The results of J.C. Flowers' Comparable Company analysis suggested that as of September 12, 2008, Merrill Lynch was undervalued relative to its comparable companies.
50. The Comparable Company valuation method does not take into account any value that is created in an acquisition due to synergies or cost savings. Therefore, it is common practice to apply an adjustment to reflect the value created from synergies or cost savings. J.C. Flowers used two methods to incorporate the predicted value of synergies created by the merger: (1) adding the \$12.86 net present value of gross cost savings calculated from the discounted cash flow method using a cost of equity of 13 percent for Merrill Lynch, and (2) applying a 25 percent control premium to the multiples valuations.⁶³ These analyses resulted in a range of values for Merrill Lynch between \$25.65 and \$41.47 per share.

C. J.C. Flowers' Comparable Transaction analysis

51. The comparable transaction approach is similar to the comparable company method, and is another commonly used valuation method for mergers and acquisitions. It entails examining other transactions involving a target company that may be deemed comparable to the target firm being valued. An advantage of the comparable transaction method is that by comparing the deal to other completed acquisitions, the comparable transaction analysis

⁶² While J.C. Flowers considered four valuation multiples in its Fairness Opinion, it focused only on the multiples with respect to 2009 earnings and tangible book value when determining Merrill Lynch's value. ("Bank of America Corporation Fairness Opinion Presentation" by J.C. Flowers, prepared September 2008 (JCF-0011811-33 at 11822).)

⁶³ "Bank of America Corporation Fairness Opinion Presentation," by J.C. Flowers, prepared September 2008 (JCF-0011811-33 at 11822).

can provide insight into the reasonableness of the proposed price and acquisition premium relative to prior transactions that have occurred.

52. The comparable transactions are chosen so that transactions and acquisition targets are as similar as possible to the acquisition target that is being valued. The criteria for identifying such transactions would include characteristics of both the acquiring firm and the target company, such as their business operations, market structure, financial structure, business risk and financial risk, and potentially the characteristics of the transaction such as the form of consideration and the timing of the transaction. Once appropriate comparable transactions are identified, valuation multiples for the acquired companies implied by their transaction prices are calculated, and a valuation range for the company being valued is derived based on those multiples.
53. In its Comparable Transaction analysis, J.C. Flowers used five prior acquisitions of large publicly-traded American brokerage firms by financial companies since 2000.⁶⁴ For each of the five transactions, J.C. Flowers analyzed the price-to-earnings multiple for the two years after the announcement of the acquisition as well as the tangible book value multiple.
54. Using the mean and median of the comparable transactions price multiples, J.C. Flowers estimated a value for Merrill Lynch of between \$32.75 and \$56.31 per share.⁶⁵

D. Merrill Lynch's value as of the merger agreement

55. The three valuation methods that J.C. Flowers applied in its Fairness Opinion to estimate the value of Merrill Lynch are widely accepted in the investment banking industry. These analyses all indicated that, as of September 14, 2008, the estimated value of Merrill Lynch was higher than the implied Transaction cost to Bank of America. J.C. Flowers arrived at

⁶⁴ "Bank of America Corporation Fairness Opinion Presentation," by J.C. Flowers, prepared September 2008 (JCF-0011811-33 at 11820).

⁶⁵ Similar to J.C. Flowers, a September 16, 2008 Deutsche Bank analyst report used a Comparable Transaction method to value the Merrill Lynch acquisition. The Deutsche Bank report analyzed acquisitions of brokerages and investment banks by banks in the 10 years prior, and found that the acquisition price of Merrill Lynch reflected a price-to-book ratio that was lower than the average ratio of other acquisitions by American banks in the past 10 years. (Mike Mayo and Chris Spahr, "Bank of America Corp: Acquiring Merrill Lynch – Post Conf. Call Analysis," Deutsche Bank, September 16, 2008.)

an estimated value of Merrill Lynch of \$35.65 per share by taking the median of upper and lower bound value estimates for Merrill Lynch based on each valuation method. Exhibit 11 summarizes the results of J.C. Flowers' valuation analyses. J.C. Flowers determined that the estimated value of Merrill Lynch was \$6.65 higher than the implied Transaction price of \$29.00 per share, and concluded that, as of September 14, 2008, the Transaction was fair, from a financial viewpoint, to Bank of America and its shareholders.⁶⁶

V. Methodology to Calculate Merrill Lynch's Value Following the Transaction Announcement

56. To determine whether, following its announcement on September 15, 2008, the Transaction remained a value-enhancing proposition to Bank of America as of the shareholder vote date (December 5, 2008) and as of the date of the merger completion (January 1, 2009), I conducted two sets of analyses. First, I updated the valuation methods used by J.C. Flowers in its Fairness Opinion for the two dates noted above. This approach has the advantage of providing an updated estimated value for Merrill Lynch on these dates that can be directly compared to J.C. Flowers' estimated value in accordance with the assumptions and judgments applied by J.C. Flowers. I conducted this analysis by updating all the inputs into the J.C. Flowers models with contemporaneous information whenever possible. Second, I have conducted an analysis that incorporates revisions to J.C. Flowers' analysis. I conducted this analysis to evaluate the robustness of the J.C. Flowers analysis to certain critical inputs and assumptions, as well as to recognize that the financial market environment changed considerably in the months following the announcement of the Transaction. Therefore, certain approaches adopted by J.C. Flowers in its Fairness Opinion became less meaningful in the months following September 15, 2008, while other aspects of its analysis became more meaningful.
57. As an example of these revisions, in addition to the group of comparable companies used by J.C. Flowers, referred herein as the "J.C. Flowers Comparables," I have examined the

⁶⁶ See Bank of America Form DEF14A (Definitive Proxy Statement), filed November 3, 2008, Appendix C, p. C-2: "Based on and subject to the foregoing, we are of the opinion that as of the date hereof the Exchange Ratio is fair, from a financial point of view, to Acquiror."

sensitivity of the valuation to an alternative selection of comparable companies using the Merrill Lynch peer group identified in the expert report of Allen Ferrell (the “Ferrell Report”),⁶⁷ an expert retained by defendants in parallel securities litigation pending in the United States District Court for the Southern District of New York, referenced herein as the “Ferrell Comparables.” The Ferrell Report identified a set of comparable companies to Merrill Lynch based on a review of analyst reports covering Merrill Lynch.⁶⁸ In my opinion, the Ferrell Comparables represent a reasonable group of companies for the purpose of conducting a sensitivity analysis with respect to the choice of comparable companies. Additional revisions are explained in more detail in the following sections.

VI. The Estimated Value of Merrill Lynch Was Higher than the Implied Cost of the Transaction as of the Shareholder Vote.

58. The merger of Bank of America and Merrill Lynch was structured as a stock-for-stock transaction with a fixed exchange ratio of 0.8595 (the “Exchange Ratio”) shares of Bank of America common stock for each share of Merrill Lynch common stock. Due to this structure, the cost of the Transaction to Bank of America declined over time as the price of Bank of America’s stock decreased during the fourth quarter of 2008.⁶⁹ At the time of the announcement, the Exchange Ratio implied a cost of the Transaction of \$50 billion, which was based on Bank of America’s \$33.74 closing stock price on September 12, 2008. As the price of Bank of America’s stock changed after the announcement, so did the implied cost of the Transaction to Bank of America.
59. Exhibit 12 shows that, as the Bank’s stock price declined through the fourth quarter of 2008, the implied cost of the Transaction declined from \$50.0 billion (\$29.00 per Merrill Lynch share)⁷⁰ as of the merger announcement on September 15, 2008 to \$21.3 billion (\$12.33 per Merrill Lynch share)⁷¹ as of the shareholder vote on December 5, 2008 and to

⁶⁷ Expert Report of Allen Ferrell, PhD as of September 16, 2011.

⁶⁸ Expert Report of Allen Ferrell, PhD as of September 16, 2011, p. 21.

⁶⁹ See Bank of America Form 8-K, filed September 18, 2008.

⁷⁰ Based on Bank of America’s closing price of \$33.74 on September 12, 2008.

⁷¹ Based on Bank of America’s closing price of \$14.34 on December 4, 2008.

\$20.9 billion (\$12.10 per Merrill Lynch share)⁷² as of the completion of the merger on January 1, 2009.⁷³

A. DCF valuation of Merrill Lynch as of the shareholder vote

60. On December 5, 2008, shareholders of Bank of America and Merrill Lynch voted to approve the merger.⁷⁴ As explained above, to value Merrill Lynch as of the shareholder vote date, I first replicated J.C. Flowers' DCF valuation using updated inputs. In particular, I updated the financial projections and cost of equity with the most recent information available as of the end of December 4, 2008. Second, I performed certain sensitivity analyses to examine the robustness of the valuation to the assumptions and inputs used in the DCF analysis.

1. Earnings projections as of December 4, 2008

61. To identify updated projections of Merrill Lynch's earnings as of December 4, 2008, I considered two sources: analyst forecasts and Merrill Lynch's management projections.⁷⁵ Analyst coverage for Merrill Lynch dropped sharply in the fourth quarter of 2008, in part due to the impending merger. According to Thomson Reuters I/B/E/S Forecast Data ("I/B/E/S"),⁷⁶ as of December 4, 2008, only two analysts had updated their 2009 earnings forecasts for Merrill Lynch within the past 30 days, while other analysts either had terminated their coverage or had not updated their forecasts (see Exhibit 13). I chose not to

⁷² Based on Bank of America's closing price of \$14.08 on December 31, 2008. While the merger was completed on January 1, 2009, the price of the consideration was based on Bank of America's closing price on December 31, 2008. (Bank of America Form 10-Q, filed May 7, 2009, p. 10.)

⁷³ The implied cost per share of the Transaction is equal to 0.8595 times the stock price of Bank of America. To calculate the aggregate cost of the Transaction as of September 15, 2008, I used 1,725.2 million fully-diluted common shares outstanding of Merrill Lynch per J.C. Flowers' calculation (JCF-0008114). To calculate the aggregate cost of the Transaction as of December 5, 2008 and January 1, 2009, I used 1,725.0 million fully-diluted common shares outstanding of Merrill Lynch, which was derived by updating J.C. Flowers' calculation. I noted that Bank of America's SEC filings disclosed a lower number of common shares that were acquired at the completion of the merger (Bank of America Form 10-Q, filed May 7, 2009, p. 10). I chose to use the number of shares derived by updating J.C. Flowers' calculation to ensure comparability of my results with the original J.C. Flowers analysis.

⁷⁴ Bank of America Form 8-K, filed December 5, 2008.

⁷⁵ The earnings projections used in the J.C. Flowers Fairness Opinion are based on analyst consensus earnings forecasts provided by SNL Financial. ("Bank of America Corporation Fairness Opinion Presentation" by J.C. Flowers, prepared September 2008 (JCF-0011811-33 at 11818).)

⁷⁶ Thomson Reuters I/B/E/S Forecast Data provides detailed and consensus analyst forecast data.

rely on the consensus analyst forecast as of December 4, 2008, as this forecast included many individual forecasts that were potentially stale at the time. I also chose not to conduct the valuation using forecasts issued by the two analysts that had updated estimates within the past 30 days, since a forecast based on two analysts may not provide a reliable estimate of future earnings.

62. As an alternative to analyst forecasts, I used Merrill Lynch's internal projections of earnings for 2009 through 2011. The projections that I relied on were obtained from a draft presentation dated December 5, 2008 (12:23 AM) for Bank of America's Board of Directors meeting held on December 9, 2008.⁷⁷ This draft 2009 Plan indicated projected earnings to common shareholders of \$882 million for 2009 and \$2.38 billion for 2010, after taking certain deductions associated with the financing costs of the first round of capital provided under the Troubled Asset Relief Program ("TARP"), which I discuss in more detail in the next section. Before the TARP-related deductions, the internal 2009 Plan indicated projected earnings of \$1.58 billion in 2009 and \$3.08 billion in 2010.⁷⁸ As Exhibit 13 shows, these internal projections were lower than the I/B/E/S consensus forecasts and the two forecasts that had been updated within the 30-day period ending December 4, 2008.
63. Management projections were not available for earnings beyond 2011. For 2012 and 2013, I assumed an annual earnings growth rate of 10 percent.⁷⁹ As shown in Exhibit 14, this assumption is at the low end of the range of the contemporaneous analyst consensus forecasts of long-term growth rates for Merrill Lynch and its comparable companies. As of December 4, 2008, the consensus long-term growth rate forecast for Merrill Lynch was

⁷⁷ See a draft version of the "2009 Plan - Board of Directors Review (12/9/08 presentation)" dated December 5, 2008 (BAC-ML-NYAG70312456-518) or the final version of the same presentation dated December 9, 2008 (BAC-ML-NYAG10006633-701).

⁷⁸ The earnings projections contained in the draft of the "2009 Plan - Board of Directors Review (12/9/08 Presentation)" (BAC-ML-NYAG70312456-518 at 70312505) included costs associated with TARP funding.

⁷⁹ In its Fairness Opinion, J.C. Flowers also used a long-term growth rate of 10 percent, as forecasted by analysts at the time of J.C. Flowers' valuation. ("Bank of America Corporation Fairness Opinion Presentation" by J.C. Flowers, prepared September 2008 (JCF-0011811-33 at 11818).)

11.8 percent,⁸⁰ and was 11.3 percent for the J.C. Flowers Comparables and 10.5 percent for the Ferrell Comparables.

64. To estimate Merrill Lynch's earnings after the first five years, I applied a 3 percent perpetuity growth rate starting in 2014. This perpetuity growth rate assumption is consistent with the assumption employed by J.C. Flowers and is at the lower end of contemporaneous long-term growth forecasts for the overall economy. In particular, the perpetuity growth rate of 3 percent is slightly below the average of the expected long-term nominal GDP growth rate of 4.2 percent and long-term inflation rate of 2.2 percent.⁸¹ In addition, analysts who disclosed valuation inputs in their reports on Merrill Lynch following the merger announcement used similar (or higher) perpetuity growth rates. For example, in its report issued on September 15, 2008, Credit Suisse applied a 5 percent perpetuity growth rate for Merrill Lynch.⁸² Credit Suisse also used a perpetuity growth rate of 5 percent when it valued Merrill Lynch as of December 1, 2008.⁸³

2. Cost of equity estimate as of December 4, 2008

65. Since the valuation of Merrill Lynch is based on earnings available to common shareholders, the discount rate should correspond to the cost of equity, which is commonly estimated using the CAPM. According to the CAPM, the cost of equity is equal to the sum of the risk free rate and the product of the firm's beta and the long-term equity risk premium ("ERP"). In its Fairness Opinion, J.C. Flowers estimated Merrill Lynch's cost of

⁸⁰ Similarly, as of December 4, 2008, SNL Financial, the source used by J.C. Flowers for Merrill Lynch's earnings projections, provided forecasts of a long-term growth rate for Merrill Lynch of 12 percent. (JCF-0020573.)

⁸¹ The projections are based on the forecasts for 70 years post-2013 prepared by the Congressional Budget Office ("CBO") as of August 2008. (Supplemental data to Congressional Budget Office, "Updated Long-Term Projections for Social Security," August 2008.) While there was no projections update in December 2008, updates issued in 2009 show that the forecasts remained relatively unchanged during the year, and a 3 percent growth rate was still close to the average of the long-term growth rate for U.S. nominal GDP and inflation. (Supplemental data to Congressional Budget Office, "CBO's Long-Term Projections for Social Security: 2009 Update," August 2009.)

⁸² Todd L. Hagerman, Jill Glaser, and Vaibhav Bajpai, "Bank of America/Merrill Lynch – A Watershed Event," Credit Suisse, September 15, 2008.

⁸³ Susan Roth Katzke and Ross Seiden, "Merrill Lynch: Reducing 4Q and FY2009 Estimates," Credit Suisse, December 1, 2008.

equity using CAPM to be 13 percent, but did not report its assumptions on the risk free rate, the beta, and the ERP underlying its calculation.⁸⁴

66. Following common practice in investment banking, I used the CAPM to calculate the cost of equity using my own estimates of the underlying inputs on the risk free rate, the beta, and the ERP. I used the yield on the 10-year U.S. Treasury bond ("T-bond") for the risk-free rate, which on December 4, 2008 was 2.55 percent.⁸⁵
67. A stock's beta measures its exposure to systematic risk, *i.e.* the extent to which the stock's return is affected by movements in the overall market. There are several approaches to estimating beta. Commonly used approaches estimate beta by conducting a historical analysis of the stock's co-movement with the overall market or by using a comparable group of companies (the industry beta approach).⁸⁶ Academic studies have also shown that, over time, beta tends to mean-revert towards a long-term market average of one, and to accommodate this pattern, an "adjusted beta" is sometimes used as a forward-looking measure of systematic risk.⁸⁷
68. I adopted the industry beta approach in my analysis. To estimate the industry beta, I estimated the betas of Merrill Lynch's comparable companies (using the J.C. Flowers

⁸⁴ "Bank of America Corporation Fairness Opinion Presentation" by J.C. Flowers, prepared September 2008 (JCF-0011811-33 at 11818).

⁸⁵ "For U.S.-based corporate valuation, the most common proxy [for the risk-free rate] is the 10-year government bond (longer-dated bonds such as the 30-year Treasury might match the cash flow stream better, but their illiquidity can cause stale prices and yield premiums)." (Tim Koller, Marc Goedhart, and David Wessels (2005), *Valuation: Measuring and Managing the Value of Companies*, McKinsey & Co., 4th Edition, p. 302.)

A survey of the members of the Association for Financial Professionals comprised of 15,000 top financial officers in U.S. and international companies shows that a near majority of all survey respondents use the yield on 10-year T-bond as a risk-free rate. (Michael Jacobs and Anil Shivdasani (forthcoming), "Do You Know Your Cost of Capital?" *Harvard Business Review*, p.3.)

⁸⁶ The industry beta approach is advocated in order to improve the accuracy of the estimation of beta. For example, Koller, Goedhart, and Wessels (2005) note: "To improve the precision of beta estimation, use industry rather than company-specific betas. Companies in the same industry face similar operating risks, so they should have similar operating betas. As long as estimation errors across companies are uncorrelated, overestimates and underestimates of individual betas will tend to cancel, and an industry median (or average) beta will produce a superior estimate." (Tim Koller, Marc Goedhart, and David Wessels (2005), *Valuation: Measuring and Managing the Value of Companies*, McKinsey & Co., 4th Edition, pp. 317-318.)

⁸⁷ For example, a study by Marshall Blume shows that beta estimates exhibit mean reversion to the value of 1 over time. In other words, high estimated betas tend to decline over time towards the market average, while low estimated betas tend to increase. (Marshall Blume (1975), "Betas and Their Regression Tendencies," *Journal of Finance* Vol. 30 No. 3, pp. 785-95.) For this reason, Bloomberg reports an adjusted beta that is calculated as $0.33 \times 1.00 + 0.67 \times \text{raw beta}$. ("Beta, HRA, and CORR Calculation FAQs," Bloomberg.)

Comparables and the Ferrell Comparables) and used their median value as an estimate of the beta for Merrill Lynch. Using the industry beta approach allowed me to use a consistent method for calculating Merrill Lynch's beta at various points in time, since using Merrill Lynch's stock returns after September 12, 2008 would not be appropriate to estimate Merrill Lynch's beta due to the impact of the announcement of the Transaction on Merrill Lynch's stock returns.⁸⁸ Exhibit 15 shows that as of December 4, 2008, the industry median beta was 1.80 based on the J.C. Flowers Comparables and 1.78 based on the Ferrell Comparables.⁸⁹ In comparison, Merrill Lynch's raw beta was 2.03, and its adjusted beta was 1.68.⁹⁰

69. The equity risk premium is a measure of the additional return required by investors for investing in the overall equity market relative to the risk free rate. There is no universally accepted methodology for calculating the ERP, but common approaches are based on a historical analysis of past equity market performance, calculations of implied equity risk premiums based on current stock market levels, combinations of historical and implied analyses, and the use of surveys. A widely used source is the Ibbotson Yearbook, whose 2008 edition estimates an historical ERP of 7.05 percent and an expected long-term ERP of 6.23 percent.⁹¹ Other sources in the academic and business literature recommend using an estimate of the long-term ERP in the range of 3.5–5.8 percent.⁹² An ERP in the range of 5–

⁸⁸ After the announcement of the merger exchange ratio, Merrill Lynch's stock price closely tracked the stock price of Bank of America. Therefore, a beta estimated based on these returns would reflect risks associated with Bank of America, as well as risks associated with Merrill Lynch.

⁸⁹ For each comparable company, the beta was estimated by regressing weekly company stock returns against those of the S&P 500 over a two-year horizon prior to each valuation date.

⁹⁰ This is based on Bloomberg estimates of the raw and adjusted betas for Merrill Lynch as of September 12, 2008, estimated by regressing weekly company stock returns against those of the S&P 500 over a two-year horizon.

⁹¹ Ibbotson SBBI Valuation Yearbook 2008, p. 98. Ibbotson developed a forward-looking measure of ERP, known as the supply-side risk premium. In his research, Ibbotson states:

"[We] estimated the forward-looking long-term equity risk premium by extrapolating the way it has participated in the real economy. [...] Supply-side models can be used to forecast the long-term expected equity return." (Roger G. Ibbotson and Peng Chen (2003), "Long-Run Stock Returns: Participating in the Real Economy," *Financial Analysts Journal*, pp. 88–98.)

"Investors should not expect a much higher or lower return than that produced by the companies in the real economy. Thus, in the long run, equity returns should be close to the long-run supply estimate." (Ibbotson SBBI Valuation Yearbook 2008, p. 92.)

⁹² For example, Koller et al. reviewed historical data and forward-looking models created by academics and industry practitioners, concluding that "[a]lthough many in the finance profession disagree about how to measure the market risk premium, we believe that 4.5 to 5.5 percent is an appropriate range." (Tim Koller, Marc Goedhart, and David

6 percent is also consistent with the views of many financial officers.⁹³ Using the above evidence and based on my professional experience, I consider an equity risk premium of 5–7 percent an appropriate range for the long-term risk premium during the December 4, 2008 to December 31, 2008 period.

70. Exhibit 16 summarizes my calculations of Merrill Lynch's cost of equity as of December 4, 2008. Using the 10-year Treasury bond yield of 2.55 percent as a risk-free rate estimate, a beta of 1.80 as indicated by Merrill Lynch's comparable companies, and an ERP of 6 percent yields an estimate of approximately 13 percent for Merrill Lynch's cost of equity. This estimate is consistent with discount rates used by equity analysts in their valuation models for Merrill Lynch at the time. For example, a Credit Suisse report on Merrill Lynch released on December 1, 2008 states, "[i]n our DCF model, we're assuming a 13% discount rate..."⁹⁴

Wessels (2005), *Valuation: Measuring and Managing the Value of Companies*, McKinsey & Co., 4th Edition, pp. 304–312.)

Fama and French estimated the expected ERP to be 3.5 percent based on the Dividend Growth Model and 5.6 percent based on historical stock returns over the 1872-2000 period. (Eugene F. Fama and Kenneth R. French (2002), "The Equity Premium," *Journal of Finance* Vol. 57 No. 2, pp. 637–59.)

A survey of 400 finance professors in December 2007 indicated an expected long-term equity risk premium of 5.8 percent. This estimate corresponds to the median of the estimates provided by financial economics professors for the 30-year arithmetic equity risk premium going forward. The arithmetic equity risk premium is the average of expected annual "excess returns" (the difference between returns for the overall equity markets and returns on the risk-free rate). The corresponding mean of the estimates is 5.74 percent. (Ivo Welch (2008), "The Consensus Estimate for the Equity Premium by Academic Financial Economists in December 2007," p. 12.)

⁹³ A survey of more than 450 Chief Financial Officers conducted by Duke University and CFO Magazine in 2009 indicated an expected long-term equity risk premium of 4.3 percent. This estimate corresponds to the median of the estimates provided by Chief Financial Officers for the long-term expected return on the S&P 500 relative to the 10-year Treasury bond yield. The estimates are as of February 26, 2009. The corresponding mean of the estimates is 4.74 percent. (John Graham and Campbell Harvey (2009), "The Equity Risk Premium Amid a Global Financial Crisis," p. 5.) A survey by the Association of Financial Professions indicates that an equity risk premium of 5-6 percent is the most commonly used range. (Michael Jacobs and Anil Shivdasani (2012), "Do You Know Your Cost of Capital?" *Harvard Business Review*, forthcoming.)

⁹⁴ Susan Roth Katzke and Ross Seiden, "Merrill Lynch: Reducing 4Q and FY2009 Estimates," Credit Suisse, December 1, 2008. A discount rate of 13 percent is also consistent with the J.C. Flowers Fairness Opinion. ("Bank of America Corporation Fairness Opinion Presentation" by J.C. Flowers, prepared September 2008 (JCF-0011811–33 at 11818).) As shown in Exhibit 16, the discount rate remained almost unchanged between September and December 2008.

3. Additional adjustments to the DCF model for the valuation as of the shareholder vote date

71. I deducted from the DCF value of Merrill Lynch certain merger-related costs and other charges ("Merger Costs and Other Charges"). These include costs associated with severance payments, capitalized merger charges and retention costs that Bank of America was expected to incur due to the Transaction. According to J.C. Flowers' Fairness Opinion, the initial estimate for these costs was \$6.275 billion (after-tax).⁹⁵
72. I also included the costs savings that were expected to be achieved from the merger with Bank of America in the DCF value of Merrill Lynch. I used Bank of America's updated cost savings projections as of December 4, 2008.⁹⁶ According to these projections, Bank of America expected the merger to result in pre-tax cost savings of \$7 billion once the cost savings were fully phased-in by 2012.⁹⁷ To calculate the terminal value of the cost savings from the merger, I assumed they would remain constant at their projected level once they are fully phased-in.⁹⁸ I adjusted these cost savings projections for the overlap in Merrill Lynch's and Bank of America's revenues and for the amortization of long-term debt marks.⁹⁹
73. In addition, I made several other adjustments that were not reflected in the J.C. Flowers Fairness Opinion because they were not known as of September 14, 2008. One adjustment was that I incorporated a forecasted \$9 billion after-tax loss for Merrill Lynch for 4Q 2008, which is taken from Merrill Lynch's 2008 4Q Pacing & FY Forecast Scenario dated

⁹⁵ "Merger Costs and Other Charges" includes the full initial mark-to-market impact from the J.C. Flowers Fairness Opinion (JCF-0011811-33 at 11828) with one exception. The Capitalized Merger Costs line item is replaced with discounted merger costs shown in the December 5, 2008 draft of the "2009 Plan - Board of Directors Review (12/9/08 Presentation)" (BAC-ML-NYAG70312456-518 at 70312505).

⁹⁶ 12/5/08 draft of the "2009 Plan - Board of Directors Review (12/9/08 Presentation)," (BAC-ML-NYAG70312456-518 at 70312505).

⁹⁷ 12/5/08 draft of the "2009 Plan - Board of Directors Review (12/9/08 Presentation)," (BAC-ML-NYAG70312456-518 at 70312506).

⁹⁸ See JCF-0008114.

⁹⁹ The other adjustments are based on the December 5, 2008 draft of the "2009 Plan - Board of Directors Review (12/9/08 presentation)" (BAC-ML-NYAG70312456-518 at 70312505). Long-term debt amortization is assumed to occur over a six year horizon (BAC-ML-NYAG00752822-3).

December 3, 2008 (Revised 6PM).¹⁰⁰ I understand that the \$9 billion after-tax loss figure reflected forecasted interim losses of approximately \$7 billion plus an additional \$2 billion “guess” as to potential “downside” for the quarter.¹⁰¹ Even though this additional \$2 billion represented a downside estimate for losses that had not yet materialized, I incorporated it in my valuation analysis by including the total after-tax loss of \$9 billion in the DCF valuation as of the shareholder vote.

74. I also adjusted the DCF model for the impact of capital provided to Merrill Lynch by the U.S. government. Following the bankruptcy of Lehman Brothers and severe dislocations in financial markets, on October 14, 2008, the U.S. Treasury announced the TARP and the injection of \$125 billion of capital into nine major U.S. financial institutions (Bank of America, BNY Mellon, Citigroup, Goldman Sachs, JP Morgan, Merrill Lynch, Morgan Stanley, State Street, and Wells Fargo) to stabilize the financial system.¹⁰² Under this program, Merrill Lynch was allocated \$10 billion, which Bank of America received after the completion of the merger in January 2009.¹⁰³
75. Under the terms of the capital injections, the government received preferred stock with a nominal value equal to the amount invested and warrants for an amount equal to 15 percent of the value of the preferred stock. The preferred stock carried an annual dividend of 5 percent for the first five years and 9 percent thereafter in the event the firm did not repay the TARP funds within five years.¹⁰⁴
76. I incorporated the effect of the \$10 billion capital infusion under the TARP on the DCF value of Merrill Lynch as of the shareholder vote.¹⁰⁵ I included the \$10 billion of TARP

¹⁰⁰ BAC-ML-NYAG10006600-13 at 10. This loss projection also appears in BAC-ML-NYAG00898487.

¹⁰¹ The \$2 billion after-tax provision for potential downside was discussed in the testimony of Ken Lewis and Neil Cotty and characterized as a “wild ass guess.” (See Testimony of Kenneth D. Lewis, *In Re Bank of America Corporation Stockholder Derivative Litigation*, March 6, 2012, 236:4-11; Testimony of Neil Cotty, *In Re Executive Compensation Investigation, Bank of America – Merrill Lynch*, March 4, 2009, 61:3-63:16.)

¹⁰² Bank of America Form 10-K, filed February 27, 2009, p. 14.

¹⁰³ Bank of America Form 10-Q, filed May 7, 2009, pp. 52 and 80.

¹⁰⁴ Congressional Budget Office, “The Troubled Asset Relief Program: Report on Transactions Through December 31, 2008,” January 2009, p.2.

¹⁰⁵ Studies have shown that the TARP provided substantial benefits to the banking sector. For example, in December 2008, the Congressional Budget Office estimated that roughly 18 percent of the TARP funding allocated to

funds that were allocated to Merrill Lynch in October 2008 as additional capital. Internal documents show that, at the time, the Bank expected it would repay the TARP funds in 5 years.¹⁰⁶ Therefore, I also included an outflow of \$10 billion as the TARP repayment in 2013.

77. In addition, I adjusted my DCF model for the cost of TARP funding. Of the \$10 billion in TARP funding allocated to Merrill Lynch in October 2008, Bank of America assigned a value of \$9 billion to the preferred stock and \$1 billion to the warrants on a fair value basis.¹⁰⁷ Consequently, Bank of America estimated that the cost associated with the \$10 billion in TARP funding allocated to Merrill Lynch was \$700 million on an annual basis for five years, which comprised \$500 million of dividends (5 percent on \$10 billion) plus \$200 million in accretion of the \$1 billion discount on the preferred shares at issuance.¹⁰⁸ This annual charge of \$700 million was included in management's projections of earnings for 2009 through 2011, so I did not make any additional TARP-related adjustments to the earnings projections for this period.
78. In addition to obtaining TARP funding, Bank of America planned to issue debt¹⁰⁹ under the Temporary Liquidity Guarantee Program ("TLGP") created by the Federal Deposit Insurance Corporation ("FDIC") in October 2008.¹¹⁰ The TLGP was designed to help banks overcome temporary liquidity problems prevalent in financial markets in the fall of 2008. Under this program, banks could obtain insurance on their debt issuances, which would insure investors against losses in the event that an issuer declared bankruptcy.¹¹¹ As

firms by that time was a subsidy. (Congressional Budget Office, "The Troubled Asset Relief Program: Report on Transactions Through December 31, 2008," January 2009, p. 2.)

¹⁰⁶ BAC-ML-NYAG70294803-4.

¹⁰⁷ Bank of America Form 10-Q, filed May 7, 2009, p. 52.

¹⁰⁸ BAC-ML-NYAG70294803-4 at 70294803 shows the calculation of costs associated with the \$15 billion of TARP funding allocated to Bank of America in October 2008, which assumes that the accretion of the discount on preferred shares will occur over five years. This is consistent with the increase in Merrill Lynch preferred dividends of \$700 million (\$500 million in dividends plus \$200 million in accretion) upon inclusion of TARP. (BAC-ML-NYAG10044708; BAC-ML-NYAG70294777-80 at 70294780; BAC-ML-NYAG10023294-8 at 10023294 and 10023296.)

¹⁰⁹ BAC-ML-NYAG70143969-95 at 70143972 and 70143983.

¹¹⁰ Pending the merger between Merrill Lynch and Bank of America, the Bank was the main recipient of the liquidity support under the TLGP for both firms.

¹¹¹ The debt guarantee program of the TLGP allowed banks to issue debt with essentially AAA ratings, with the FDIC initially guaranteeing in full, through maturity or June 30, 2012, whichever came first, the senior unsecured debt

of December 2, 2008, Bank of America planned to issue \$23 billion between 4Q 2008 and 4Q 2009 under the TLGP.¹¹² I have made the assumption that these planned issuances were related to the acquisition of Merrill Lynch.¹¹³ Therefore, I included the forecasted cost of the planned debt issuances under the TLGP program in the DCF valuation of Merrill Lynch as of the shareholder vote.¹¹⁴ The base case valuation, which includes all the adjustments described in this section, is shown in Exhibit 17.

4. Sensitivity analyses to the DCF valuation of Merrill Lynch as of the shareholder vote

79. In addition to the base case scenario for the DCF valuation of Merrill Lynch described above, I have performed a set of sensitivity analyses: (a) a sensitivity using discount rates ranging from 11 percent to 15 percent (I determined that this range was appropriate based on the sensitivity of Merrill Lynch's cost of equity to estimates of the industry beta and the ERP range of 5 to 7 percent, as shown in Exhibit 18); and (b) a sensitivity using terminal growth rates ranging from 2 percent to 4 percent. The upper end of this range assumes that Merrill Lynch's net income would grow at essentially the same rate as U.S. nominal GDP in perpetuity. The lower end of this range assumes that Merrill Lynch's net income would

issued by a participating entity between October 14, 2008 and June 30, 2009. The FDIC charged a fee for this insurance, which was based on the amount and term of the debt issued. (FDIC Press Release, "FDIC Announces Plan to Free Up Bank Liquidity," October 14, 2008; FDIC Press Release, "FDIC Board of Directors Approves TLGP Final Rule," November 21, 2008.) The issuance period was later extended through October 31, 2009; debt issued on or after April 1, 2009 was guaranteed through December 31, 2012. (FDIC Press Release, "FDIC Extends the Debt Guarantee Component of Its Temporary Liquidity Guarantee Program," March 17, 2009.)

¹¹² BAC-ML-NYAG00738688 shows planned issuances of \$9 billion in 4Q 2008, \$5 billion in 1Q 2009, \$5 billion in 2Q 2009, \$2 billion in 3Q 2009, and \$2 billion in 4Q 2009.

¹¹³ This is a potentially conservative assumption. If the TLGP issuances were in the nature of replacement funding instead of additional funding, then the inclusion of all costs associated with that debt would overstate the impact of the TLGP debt on Merrill Lynch's future earnings. Certain documents that I have reviewed suggest that Bank of America used at least part of its TLGP debt issuances to replace Merrill Lynch's short-term funding. (See, e.g., a Bank of America presentation dated November 4, 2008 (BAC-ML-NYAG70143969-95 at 70143972 and 70143983).) To the extent that some of the TLGP debt replaced, rather than added to, Merrill Lynch's total financing activities, then subtracting the entire TLGP debt issuance cost from Merrill Lynch's earnings potentially double-counts Merrill Lynch's financing costs and would understate its expected earnings.

¹¹⁴ BAC-ML-NYAG00738688. For the annual estimates of the cost of debt issued under the TLGP, I used the "Net NII Impact" identified in this document. The net NII impact identified in this document was \$325 million for 2009, \$362 million for 2010, \$344 million for 2011, and \$152 million for 2012.

grow at the rate of inflation.¹¹⁵ The results of these sensitivity analyses are shown in Exhibit 19.

5. Merrill Lynch's value as of the shareholder vote based on DCF analysis

80. Exhibit 17 shows the results of the base case DCF valuation for Merrill Lynch as of the shareholder vote. The base case DCF calculation for the per share value of Merrill Lynch, after adjusting the valuation for the forecasted 4Q 2008 operating losses and marks, costs and benefits associated with the TARP, the issuance costs associated with TLGP funding, merger-related and other charges, and projected cost savings, results in \$26.33. The sensitivity analyses with respect to the perpetuity growth rate and discount rate indicate a range of DCF values for Merrill Lynch as of the shareholder vote date between \$19.53 and \$38.16 per share (see Exhibit 19).

B. Comparable Company valuation of Merrill Lynch as of the shareholder vote

81. To value Merrill Lynch as of the shareholder vote using a Comparable Company approach, I used the same set of comparable companies and valuation multiples that were used in the J.C. Flowers Fairness Opinion.¹¹⁶ In addition, I performed several sensitivity analyses to assess the robustness of the results of the updated J.C. Flowers Comparable Company analysis. In particular, I considered an alternative group of comparable companies. I also used my professional experience and judgment to select the multiples that were most relevant for the valuation of financial institutions during this period of substantial uncertainty in financial markets.

¹¹⁵ As of August 2008, the Congressional Budget Office projected the long-term nominal GDP growth rate of 4.2 percent and long-term inflation rate of 2.2 percent. See Supplemental data to Congressional Budget Office, "Updated Long-Term Projections for Social Security," August 2008.

¹¹⁶ "Bank of America Corporation Fairness Opinion Presentation" by J.C. Flowers, prepared September 2008 (JCF-0011811-33 at 11819).

1. Updated J.C. Flowers Comparable Company analysis as of the shareholder vote

82. In its Fairness Opinion, J.C. Flowers considered price-to-earnings, price-to-book value, and price-to-tangible book value multiples in conducting its Comparable Company valuation of Merrill Lynch. For each comparable company, I updated the valuation multiples based on their stock prices as of December 4, 2008 and the most recent financials and updated earnings estimates reported by that date.
83. Exhibit 20a shows the results of the updated J.C. Flowers Comparable Company analysis as of the shareholder vote. J.C. Flowers used price-to-earnings and price-to-tangible book value multiples in its valuation of Merrill Lynch. As of December 4, 2008, Merrill Lynch's comparable companies traded at a median multiple of 6.15x with respect to 2009E earnings and 0.78x with respect to tangible book value. However, as I explain below, given the changes in financial markets after September 15, 2008, and in particular given the extreme volatility in earnings projections at the time, I do not consider price-to-earnings multiples to be very meaningful as of the shareholder vote date.

2. Revisions to J.C. Flowers analysis with respect to the choice of valuation multiples

84. As I mentioned earlier in this report, thought is required about the choice of valuation metrics since the relevance of various financial metrics varies over time as economic and market conditions change. In its Fairness Opinion, J.C. Flowers used valuation multiples based on earnings and tangible book value. However, uncertainty in financial markets rose substantially following the bankruptcy of Lehman Brothers on September 15, 2008 and remained escalated for the remainder of the year. In such market environments, price-to-earnings multiples for financial institutions are less reliable because actual earnings and earnings forecasts tend to be highly volatile and uncertain. Since there is less visibility to investors about an institution's future earnings in uncertain market conditions, investor focus shifts to valuing companies based on metrics such as tangible book value.
85. Exhibits 21a-b show the increase in the degree of uncertainty surrounding future earnings for the J.C. Flowers and Ferrell Comparables during 2008. The median normalized

standard deviation of the earnings forecasts for these comparable companies rose sharply after September 15, 2008, highlighting that there was less visibility about future earnings for the sector. After September 2008, several financial analysts commented that they no longer relied on price-to-earnings multiples.¹¹⁷ Therefore, in my revised analysis, I did not consider the valuations based on price-to-earnings multiples to be reliable during this time period.¹¹⁸

86. In addition to the choice of valuation multiples, I also tested the robustness of J.C. Flowers' adjustments for synergies/cost savings in its Comparable Company valuation. J.C. Flowers used two methods to adjust the value of Merrill Lynch based on the multiples of comparable companies to reflect the benefits of synergies/cost savings resulting from the merger: (1) applying a 25 percent control premium to the multiples valuations, and (2) adding the net present value of gross cost savings. J.C. Flowers' Fairness Opinion did not explain the rationale underlying a 25 percent control premium adjustment, though I noted that in its analysis of comparable transactions, J.C. Flowers calculated an average 1-day acquisition premium of 23 percent for comparable transactions excluding Bear Stearns.¹¹⁹
87. Based on my professional experience and judgment, it is more informative to adjust the Comparable Company valuation using the net present value of costs savings instead of applying a historical or market-based control premium. The appropriate control premium varies across transactions and depends on the level of expected synergies; hence, a historical or market-based control premium adjustment will be less reflective of what an

¹¹⁷ For example, in its October 17, 2008 report on Merrill Lynch, Bernstein Research makes the following statement:

"We have found that the major brokerage firms' common stocks trade on a price-to-tangible book basis. Bernstein believes that the tangible book value of a securities firm is a 'hard number' for these companies reflecting the industry's mark-to-market accounting discipline and the rapid turnover of brokerage firm balance-sheets. By comparison, forecasting the highly cyclical earnings is problematic and therefore price-to-earnings valuation ratios are not accurate or stable." (Brad Hintz, Michael Werner, and Vincent M. Curotto, "Merrill Lynch: The Thundering Herd Waits for Its Shareholder Vote," Bernstein Research, October 17, 2008.)

¹¹⁸ In its Fairness opinion, J.C. Flowers also considered Merrill Lynch's value estimated based on book value multiples of comparable companies. However, J.C. Flowers only used price-to-earnings and tangible book value multiples to calculate the median value of the firm in its summary exhibit. (See FPK0000838.)

¹¹⁹ "Bank of America Corporation Fairness Opinion Presentation" by J.C. Flowers, prepared September 2008 (JCF-0011811-33 at 11819-20).

acquirer would be willing to pay than an adjustment based on the expected value of net cost savings for the specific transaction under consideration.

88. Exhibit 20a shows the results of the Comparable Company analysis conducted by J.C. Flowers, updated as of the shareholder vote. The wide range of estimates for the value of Merrill Lynch obtained using price-to-earnings multiples highlight the unreliable nature of price-to-earnings multiples during this time period. Based on 2009 estimated earnings, Merrill Lynch's value (before adjusting for cost savings) is calculated to be \$2.41 per share (using medians) but is calculated to be \$6.35 per share using 2010 estimated earnings – a difference of more than 150 percent. J.C. Flowers' updated Comparable Company analysis implies a per-share value of Merrill Lynch of between \$2.73 and \$16.10 as of the shareholder vote date.
89. Exhibit 20b shows a Revised Comparable Company valuation where I have reported the results of the Comparable Company analysis based on J.C. Flowers Comparables without a 25 percent control premium and based on the valuation metric that I consider to be the most meaningful given the market conditions at the time: tangible book value. Based on this analysis, the estimated value of Merrill Lynch as of the shareholder vote was within a range of \$15.39 to \$16.10 per share.

3. Sensitivity check with respect to the choice of J.C. Flowers' comparable company group

90. To check if the results of the Revised Comparable Company analysis are sensitive to the choice of the group of comparable companies, I considered an alternative set of comparable companies. As discussed earlier, I used a set of companies that Professor Allen Ferrell identified in his expert report as being comparable to Merrill Lynch,¹²⁰ which he identified by reviewing equity research analyst reports for Merrill Lynch and other companies in the industry. The Ferrell Comparables consist of nine companies.

¹²⁰ See Appendix C of the Expert Report of Allen Ferrell, PhD as of September 16, 2011.

91. Exhibit 20c presents valuation multiples for the Ferrell Comparables. The median price-to-tangible-book multiple is 0.92x (higher than 0.78x for the J.C. Flowers Comparables). Because Lazard traded at much higher multiples than the other companies in the Ferrell group, I only considered valuations implied by median multiples for this analysis. Adding the discounted net present value of net cost savings implies a valuation for Merrill Lynch's stock of \$16.60 per share. This valuation is comparable to the range I estimated based on the J.C. Flowers Comparables.

4. Merrill Lynch's value as of the shareholder vote based on Comparable Company analysis

92. Overall, the revision to the J.C. Flowers Comparable Company analysis (which uses the present value of net cost savings and focuses on the most relevant multiples at this time) results in a valuation range between \$15.39 and \$16.10 for Merrill Lynch as of the shareholder vote. My sensitivity analysis resulted in a value of \$16.60 per share confirming that this range is not affected meaningfully by the choice of the group of comparable companies. However, the range is affected by the choice of valuation multiples and the nature of adjustment for cost savings: using valuation metrics that were more appropriate at times of high uncertainty in financial markets (tangible book value) and a more precise estimate of the expected synergies from the Transaction results in a higher value for Merrill Lynch. Similar to the DCF results as of the shareholder vote, the estimated valuation range for Merrill Lynch based on the Comparable Company analysis is higher than the \$12.33 implied Transaction cost as of this date.

C. Comparable Transaction valuation of Merrill Lynch as of the shareholder vote

93. Similar to my approach in the Comparable Company analysis, I updated the Comparable Transaction analysis used by J.C. Flowers. Valuation multiples for comparable transactions are typically shown as of the announcement day for each transaction and therefore do not change with the valuation date for Merrill Lynch. Thus, the only inputs I updated for the Comparable Transaction analysis as of the shareholder vote were Merrill Lynch's earnings projections and tangible book value. To estimate Merrill Lynch's value,

J.C. Flowers calculated multiples with respect to expected earnings and with respect to its tangible book value. As discussed earlier, given the financial market environment at the time, I considered price-to-earnings multiples to be a less appropriate metric for valuing Merrill Lynch. Exhibit 22 shows the results of the updated J.C. Flowers Comparable Transaction analysis as of the shareholder vote. The tangible book value multiple implies a valuation range for Merrill Lynch between \$24.13 and \$29.95 per share.

94. As a sensitivity analysis, I also checked the SDC Platinum Mergers and Acquisitions database to identify other potential completed domestic acquisitions of publicly-traded brokers by financial services firms announced between January 1, 2000 and December 4, 2008 with a transaction value of at least \$1 billion.¹²¹ This search yielded the five precedent transactions considered by J.C. Flowers and one additional transaction that was not included in the J.C. Flowers' list: the merger between Chase Manhattan and JP Morgan in 2000. Adding the Chase Manhattan and JP Morgan merger does not significantly change the median multiples for comparable transactions.
95. Almost all of the comparable transactions occurred before 2008 and in a market environment that was significantly different from the financial market conditions that prevailed in the fourth quarter of 2008. The only acquisition of a U.S. publicly-traded brokerage firm that occurred in 2008 was the acquisition of Bear Stearns by JP Morgan, which, because of the underlying government support, was not representative of typical transactions. For these reasons, in my judgment, the Comparable Transaction analysis is less meaningful as an indicator of value in the post-Lehman environment than some of the other approaches. Accordingly, I placed less weight on the Comparable Transaction analysis as of the shareholder vote and excluded it from my revised valuation analysis.

¹²¹ I identified brokers as firms in the Standard Industrial Classification ("SIC") of "Security brokers, dealers, and floatation companies" (SIC code of 6211). I only included transactions in which the acquirer owned 100 percent of the target after the transaction.

D. Merrill Lynch's value as of the shareholder vote

96. In this section, I presented a valuation of Merrill Lynch using three standard valuation approaches adopted by J.C. Flowers in its Fairness Opinion. Exhibits 23a–b summarize my findings: Exhibit 23a shows results of the updated J.C. Flowers analyses, while Exhibit 23b shows results of my revised valuation analyses. Based on the updated J.C. Flowers analyses, as of the shareholder vote, the estimated value of Merrill Lynch was \$16.04 per share. This value is calculated as the median of the minimum and maximum values resulting from the different valuation approaches. My revised analysis shows a value of Merrill Lynch of \$18.07 per share. Both analyses arrived at estimated values of Merrill Lynch that are higher than the \$12.33 implied Transaction cost to Bank of America at the time. Therefore, I concluded that the merger between Bank of America and Merrill Lynch was expected to be a value-enhancing transaction for Bank of America as of the date of the shareholder vote.

VII. The Estimated Value of Merrill Lynch Was Higher than the Implied Cost of the Transaction as of the Completion of the Merger

A. Adjustments to the valuation approaches to value Merrill Lynch as of the completion of the merger

97. The merger between Bank of America and Merrill Lynch was completed on January 1, 2009. Exhibit 12 shows that as of January 1, 2009, the implied value of the consideration was \$12.10 per share of Merrill Lynch,¹²² which I used as the benchmark to determine whether the Transaction was value-enhancing to Bank of America as of the completion of the merger. To value Merrill Lynch as of the completion of the merger, I first updated the J.C. Flowers analyses using the three valuation methods employed earlier (the DCF, Comparable Company, and Comparable Transaction methods). As in the previous section, I then also conducted revised analyses wherein I modified the updated J.C. Flowers analyses to account for the market environment at the time. I updated all valuation inputs

¹²² Based on Bank of America's share price of \$14.08 as of December 31, 2008.

with the most recent information available as of the end of December 31, 2008. In this section, I describe only the relevant updates and results.

98. For the DCF valuation as of the completion of the merger, I used the most up-to-date Merrill Lynch management projections that were available as of December 31, 2008 (which were dated December 23, 2008).¹²³ This December 23, 2008 version of the management projections included an updated earnings forecast for 2009.¹²⁴ To update the earnings projections for the years 2010 and 2011, I inferred earnings growth rates for these years from the December 5, 2008 (12:23 AM) version of management projections¹²⁵ and applied them to the 2009 earnings number from the December 23, 2008 version. For the two subsequent years 2012 and 2013, I grew earnings at a 10 percent annual rate, which was lower than the contemporaneous consensus forecasts of long-term growth rates for Merrill Lynch and the J.C. Flowers Comparables and in line with the forecast for the Ferrell Comparables (see Exhibit 14). After 2013, earnings were assumed to grow at an annual rate of 3 percent in perpetuity.
99. I incorporated the most up-to-date forecasts for expected cost savings and operating losses (including marks). For cost savings, I used the estimates set forth in the December 5, 2008 draft and final versions of the Bank of America presentation to the Board of Directors dated December 9, 2008.¹²⁶ For marks and forecasted 4Q 2008 operating losses, I used estimates as of December 31, 2008, reflecting a total forecasted loss of \$15.335 billion.¹²⁷

¹²³ "FY2009 Plan - December 23, 2008" (BAC-ML-NYAG00559531-635 at 559535-40).

¹²⁴ As I mentioned above, these projections state that no further impact was expected from additional reductions in the size of Merrill Lynch's balance sheet. See "FY2009 Plan - December 23, 2008" (BAC-ML-NYAG00559531-635 at 559533): "No significant changes in results as a result of material changes in Balance Sheet/Risk Limits."

¹²⁵ 12/5/08 draft of "2009 Plan - Board of Directors Review (12/9/08 Presentation)" (BAC-ML-NYAG70312456-518 at 70312505).

¹²⁶ 12/5/08 draft of "2009 Plan - Board of Directors Review (12/9/08 Presentation)" (BAC-ML- NYAG70312456-518). Note that the draft presentation details projected cost savings and other adjustments for 2009-2011 on page 48. However, the final version only provides numbers for 2009 on page 57. ("2009 Plan - Board of Directors Review (12/9/08 Presentation)" (BAC-ML-NYAG10006633-701 at 10006691).) Therefore, to be conservative I used the 2009 numbers from the final version of the presentation, but I continued to use the numbers for 2010-2011 from the draft version of the presentation, since these adjustments are not constant through time. The only exception is the amortization of long-term debt marks, for which I used the numbers in the final version and assumed amortization occurs over a six-year period, consistent with my assumption in the previous section (see BAC-ML-NYAG00752822-3).

¹²⁷ BAC-ML-NYAG00898487.

100. Similar to the DCF model as of the shareholder vote, I incorporated costs and benefits associated with the TARP and TLGP¹²⁸ funding to the DCF valuation of Merrill Lynch as of the completion of the merger. As mentioned in the previous section, in October 2008, the U.S. government allocated \$10 billion of TARP funding to Merrill Lynch, which Bank of America received after the completion of the merger.¹²⁹ The record indicates that during the last two weeks of December 2008, executives from Bank of America and various government officials held discussions regarding an additional capital infusion to Bank of America under the TARP.¹³⁰ However, it is my understanding that as of December 31, 2008, no agreement had been reached with the government regarding an amount of additional TARP capital or the associated terms of such funding. On January 16, 2009, Bank of America announced that it had received an additional capital infusion of \$20 billion upon issuing preferred stock with an 8 percent coupon under the TARP.¹³¹
101. For the purpose of my analyses, I was required to make an assumption regarding the amount and terms of TARP funding that was expected to be forthcoming if Bank of America proceeded to complete the Transaction. I assumed that Bank of America needed an additional \$15 billion in TARP funding at that time, which was approximately equal to the forecasted 4Q 2008 losses at Merrill Lynch as of December 31, 2008.¹³² According to an internal email, in which Joe Price summarized a discussion with Kevin Warsh, then a member of the Board of Governors of the Federal Reserve, regarding a potential capital infusion into Bank of America, the Bank was considering a “capital instrument (of approximately 15bn +/-) that filled the capital hole created by the Q4 loss.”¹³³ Based on this, I included the financial effects of an incremental \$15 billion of TARP funding in my valuation as of January 1, 2009.

¹²⁸ I used revised estimates to estimate the costs of the TLGP issuances. (BAC-ML-NYAG00898594 and BAC-502-WLRK 00012898–903 at 12900.)

¹²⁹ Bank of America Form 10-Q, filed May 7, 2009, pp. 52 and 80.

¹³⁰ See, for example, BAC-ML-NYAG-502-00001125–8 and BAC-ML-NYAG00003877-UR–82-UR.

¹³¹ Bank of America Form 8-K, filed January 16, 2009.

¹³² See BAC-ML-NYAG00898487.

¹³³ BAC-502-WLRK(CSI)00000074–6 at 74.

102. As before, I included in the DCF model both the inflow of TARP funds and the repayment of those funds after 5 years. I also adjusted Merrill Lynch's earnings projections for the years 2009 through 2013 for the financing costs associated with the initial \$10 billion of TARP funds allocated by the U.S. government to Merrill Lynch in October 2008 and the additional \$15 billion of TARP funds needed as of December 31, 2008.¹³⁴ I noted that Bank of America planned for a repayment horizon of 10 years for the additional TARP funds received in January 2009.¹³⁵ By assuming a shorter repayment horizon than the 10-year amortization period employed by Bank of America, my calculation potentially understates the value of the TARP funding provided to Bank of America. In addition, I assigned 75 percent of the cost associated with the Asset Guarantee Term Sheet to Merrill Lynch.¹³⁶
103. Exhibit 16, which was discussed in the previous section, shows the calculation of the discount rates as of the various dates on which I performed valuations for Merrill Lynch. The exhibit shows that the cost of equity for Merrill Lynch did not change substantially between December 4, 2008 and December 31, 2008. Therefore, I used a discount rate of 13 percent to calculate the present value of Merrill Lynch's earnings as of the completion of the merger.

¹³⁴ In exchange for the \$10 billion of TARP funding, Bank of America issued preferred shares Series Q and warrants. In exchange for the \$15 billion of TARP funding, I assumed Bank of America would issue preferred shares and warrants with the same terms as preferred shares Series R and warrants that were issued in January 2009. The \$2.23 billion annual cost associated with TARP funding includes a 5 percent annual dividend on the \$10 billion of Series Q preferred shares and an annual cost of \$200 million due to accretion of the discount on these preferred shares at issuance (or the cost of the warrants). In addition, the \$2.23 billion includes an 8 percent annual dividend on the additional \$15 billion of preferred shares (similar to the dividend paid on Series R shares issued in January 2009) and an annual cost of \$330 million due to accretion of the discount on those preferred shares at issuance (equal to 75 percent of the annual accretion on the \$20 billion Series R issuance). I assumed the TARP funding was available to Merrill Lynch as of January 2009.

¹³⁵ Bank of America Form 10-Q, filed May 7, 2009, p. 52.

¹³⁶ The Asset Guarantee Term Sheet was an insurance arrangement between Bank of America, the Treasury, the FDIC and the Federal Reserve that would provide insurance on losses exceeding \$10 billion for Bank of America on a pool of assets. The agreement was announced on January 16, 2009. For more details, see the Asset Guarantee Term Sheet at <http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20090115a1.pdf>. While the exact terms of the Asset Guarantee Term Sheet were unknown as of December 31, 2008, internal documents indicate that Bank of America considered this program in its forecasts on December 27, 2008. (BAC-502-WLRK-00050809-19.) Bank of America estimated that 75 percent of the covered assets were legacy Merrill Lynch. ("Q4 2008 Bank of America Corporation Earnings Conference Call – Final," January 16, 2009, FD (FAIR DISCLOSURE) WIRE.)

104. Exhibit 24 shows the results of the base case DCF valuation as of the completion of the merger. After adjusting for forecasted 4Q 2008 operating losses and marks, merger-related costs and other charges, costs and benefits associated with TARP and TLGP funding, and projected cost savings, the estimated value of Merrill Lynch as of the completion of the merger was \$22.37 per share. I also performed the sensitivity analyses on the DCF valuation with respect to the discount rate and the perpetuity growth rate, similar to those I performed for the December 5, 2008 valuation discussed earlier. The results of these sensitivity analyses, presented in Exhibit 25, show that the estimated DCF value of Merrill Lynch on January 1, 2009 ranged between \$16.29 and \$33.30 per share.
105. For the Comparable Company valuation as of the completion of the merger, I updated the valuation multiples for the comparable companies based on their stock prices as of December 31, 2008 and the most recent financials and earnings forecasts reported by that date. I relied on internal estimates of Merrill Lynch's book value and tangible book value as of December 31, 2008.¹³⁷
106. For updated earnings projections, I used the same numbers as in the DCF analysis, adjusted for the costs of the TARP, the TLGP, and the Asset Guarantee Term Sheet. The inclusion of the expected costs of the TARP funding caused the projected 2009 earnings for Merrill Lynch to be negative, rendering the price-to-earnings multiples not meaningful. Therefore, the updated J.C. Flowers Comparable Company analysis as of the completion of the merger is based only on multiples with respect to tangible book value. As before, in addition to the updated J.C. Flowers analysis, I conducted a revised analysis using tangible book value multiples and the present value of net cost savings as a more relevant estimate of the merger synergies. I also performed a sensitivity analysis using the Ferrell Comparables.
107. As shown in Exhibit 26a, the updated J.C. Flowers Comparable Company analysis indicates a value range of \$6.23 to \$14.18 per share for Merrill Lynch. The revised analysis indicates a value range of \$13.86 to \$14.18 per share (see Exhibit 26b). Exhibit

¹³⁷ BAC-ML-NYAG00898487.

26c shows that the sensitivity analysis with respect to the use of the Ferrell Comparables results in a value of \$14.18 per share for Merrill Lynch.¹³⁸

108. For the Comparable Transaction valuation as of the completion of the merger, I updated Merrill Lynch's earnings projections and tangible book value. For the reasons noted earlier, multiples based on Merrill Lynch's expected earnings were less meaningful than the tangible book value multiple at the time. Therefore, I focused on the valuation based on Merrill Lynch's tangible book value multiple, which implied a value of Merrill Lynch ranging from \$15.89 to \$19.72 per share as of the completion of the merger (see Exhibit 27). However, as discussed earlier, in my judgment, the valuation based on the Comparable Transaction approach was less meaningful than the other approaches, given the market environment at the time.

B. The value of Merrill Lynch as of the completion of the merger

109. Exhibits 28a–b summarize the valuation results for Merrill Lynch as of the completion of the merger. Exhibit 28a summarizes the updated J.C. Flowers analyses, while Exhibit 28b summarizes my revised analyses. The median value resulting from the application of the three J.C. Flowers valuation methodologies is \$16.09 per share. This value is higher than the implied cost of the Transaction of \$12.10 per share as of January 1, 2009. The median value based on my revised analysis, which focuses on the DCF and Comparable Company valuation is \$15.24 per share. This value is also higher than the implied cost of the Transaction of \$12.10 per share as of January 1, 2009. Therefore, I concluded that the merger between Bank of America and Merrill Lynch was expected to be a value-enhancing transaction for Bank of America as of the completion of the merger.

VIII. Conclusions

110. I have performed valuation analyses using three valuation methods that are widely used to value M&A transactions. My analysis finds that, despite the forecasted 4Q 2008 losses at

¹³⁸ Because Lazard traded at much higher multiples than the other companies in the Ferrell group, I only consider valuations implied by median multiples for this analysis.

Merrill Lynch and the actual incurred losses during this quarter, and despite lower expectations for future earnings relative to those as of the Transaction announcement date, the merger with Merrill Lynch remained a value-enhancing transaction for Bank of America. Bank of America viewed this transaction from a long-term perspective, and the strategic long-term benefits discussed in this report continued to remain compelling considerations for this Transaction. Exhibits 5 and 6 show that, using either the updated J.C. Flowers analyses or my own revised analyses, the estimated value of Merrill Lynch was higher than the implied cost of the Transaction as of the shareholder vote and as of the completion of the merger. I therefore conclude that, following the announcement of the merger on September 15, 2008, the Transaction remained value-enhancing to Bank of America as of the aforementioned dates.

November 1, 2012



Anil Shivdasani